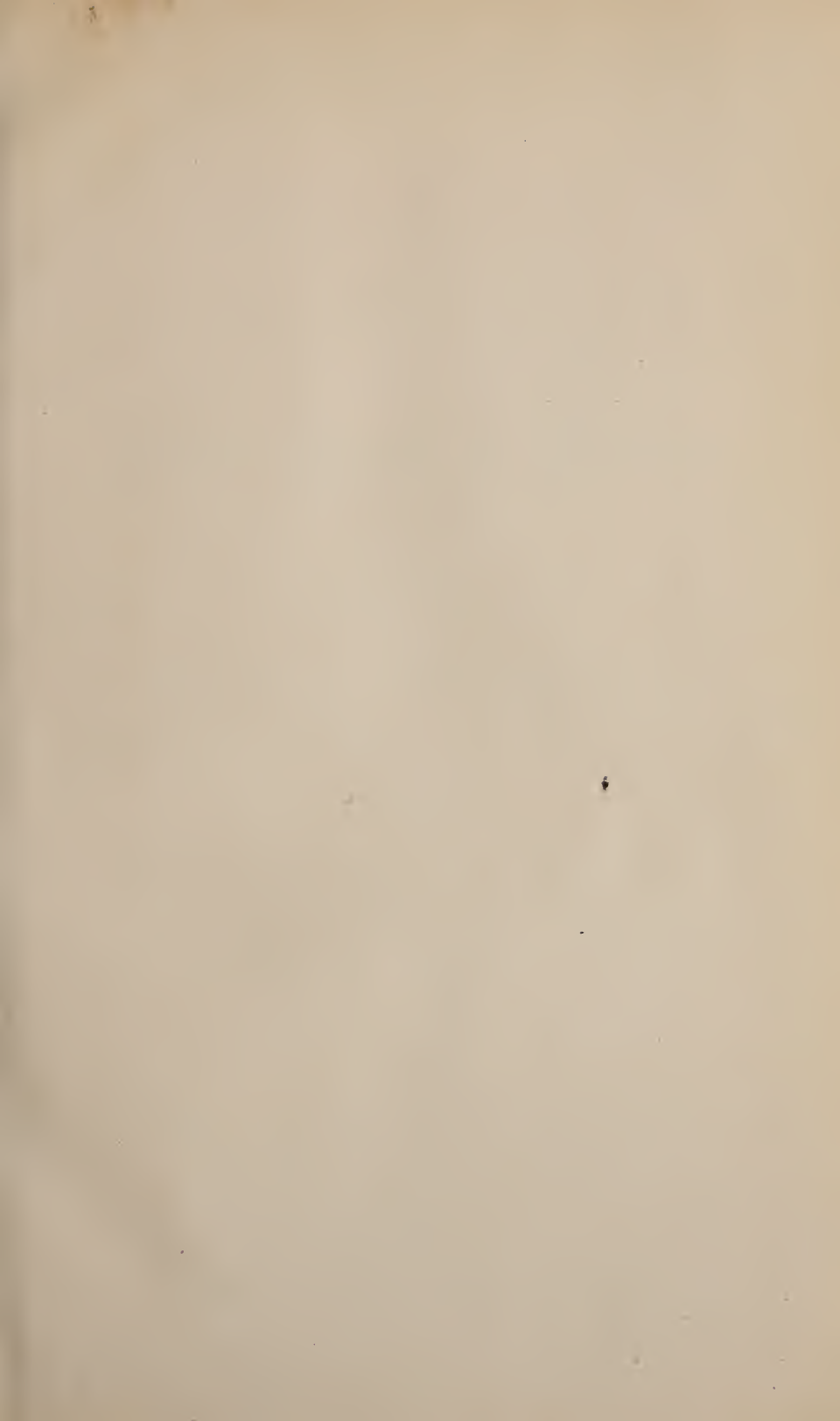




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Edited by

THAD. M. STEVENS, M. D.

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THAD. M. STEVENS, M. D.,

SECRETARY.

INDIANA JOURNAL OF MEDICINE

VOL. IV.

MAY, 1873.

No. 1.

Original Communications.

STATISTICAL SKETCH OF THE MEDICAL PROFESSION OF THE U. S.

BY J. M. TONER, M. D., WASHINGTON, D. C.

In response to your polite note of the 28th ult., I have the honor to place the following statistical picture of the medical profession of the United States at your disposal. The sources from which the data have been collected in each instance are given.

The population of our country is so great, and the extent of our territory so vast and diversified, that it is only by a careful classification and the aid of figures that we can form any just conception of the extent of the fields of labor and the immense army of professional workers in it.

Table I, is compiled from the U. S. census report for 1870, giving the number, age, sex, and nationality of the physicians of our country, by States and Territories. I will not occupy space by any speculations, but furnish facts as I find them, and leave your readers to draw deductions and form opinions.

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TABLE I.—Showing the Age, Sex and Nativity of the Physicians and Surgeons of the United States, as reported for each State and Territory in the Census of 1870.

STATES AND TERRITORIES.	AGE AND SEX.				NATIVITY.												
	Number.	16 to 59.		60 & over.	U. States.	Germany.	Ireland.	England and Wales.	Scotland.	Sweden, Norway, Denmark.	France.	Other, north of Europe.	Italy.	Other, south of Europe.	British America.	China and Japan.	
		60 & over.															
		Male.	Female.														
Alabama.....	1418	1335	1	80	2	1392	5	7	6	2	.....	4	.....	1	.....	.....
Arizona.....	22	22	.....	.....	.....	18	.....	1	.....	.....	.....	.....	.....	.....	3	.....
Arkansas.....	1026	969	.....	57	.....	1009	3	2	4	1	.....	2	1	1	1	.....
California.....	1257	1181	11	64	1	760	95	50	50	18	4	30	8	3	14	28	
Colorado.....	70	69	.....	1	.....	60	2	.....	2	1	.....	2	.....	.....	3	174
Connecticut.....	680	575	4	101	.....	651	10	11	3	1	.....	.....	.....	.....	.....	.....
Dakota.....	20	20	.....	.....	.....	15	.....	.....	1	.....	.....	.....	.....	.....	2	.....
Delaware.....	170	157	2	11	.....	164	3	1	.....	2	.....	.....	.....	.....	.....	.....
District of Columbia.....	326	290	4	32	.....	281	14	13	11	2	1	1	2	.....	.....	.....
Florida.....	248	232	1	15	.....	240	1	1	1	.....	.....	.....	.....	.....	.....	.....
Georgia.....	1537	1433	6	93	5	1510	8	8	5	.....	.....	2	1	.....	1	.....
Idaho.....	33	33	.....	.....	.....	19	1	1	3	.....	.....	.....	.....	.....	1	2
Illinois.....	4861	4572	24	265	.....	4158	298	61	132	25	19	27	6	3	37	85
Indiana.....	3613	3461	15	137	.....	3407	102	29	36	4	.....	10	.....	.....	12	10
Iowa.....	1865	1774	7	83	1	1663	74	21	34	9	5	9	4	.....	12	20
Kansas.....	906	862	7	37	.....	816	13	11	21	6	4	6	2	.....	2	16
Kentucky.....	2414	2285	6	119	4	2336	31	15	15	5	1	2	2	1	.....	5
Louisiana.....	939	870	3	66	.....	789	27	11	17	3	2	49	3	6	3	12
Maine.....	818	711	7	99	1	794	2	.....	5	2	.....	.....	.....	.....	15	.....

Maryland.....	1257	115	1	101	1188	44	9	6	1	1	2	2	2	2	2
Massachusetts.....	2047	1775	51	217	4 1864	22 49	33 10	3	5	3	1	2	52	2	2
Michigan.....	1034	2874	13	142	5 1624	80 37	68 37	5	9	5	9	4	162	2	2
Minnesota.....	402	380	2	20	323	27 6	8 4	6	3	2	1	2	16	2	2
Mississippi.....	1511	1415	.....	96	1485	7 11	2	2	3	1	8	13	54	2	2
Missouri.....	3560	3369	13	177	1 3156	198 59	39 11	2	19	8	1	13	54	2	2
Montana.....	42	42	.....	.....	28	5	1	1	1	1	1	1	2	3	3
Nebraska.....	247	238	.....	9	210	11 7	7 4	1	1	1	1	1	4	2	2
Nevada.....	110	103	.....	7	77	5	.....	1	1	2	3	1	3	2	2
New Hampshire.....	565	466	.....	99	547	1 2	3 2	2	1	1	1	1	9	2	2
New Jersey.....	1208	1080	14	113	1 1058	55 22	35 5	5	7	6	1	3	13	2	2
New Mexico.....	27	25	.....	2	24	1	1	1	1	1	1	1	1	1	1
New York.....	6810	6110	93	600	7 5474	567 214	188 49	7	56	38	7	34	139	2	2
North Carolina.....	1143	1058	3	82	1132	2 4	2	2	2	2	1	1	1	1	1
Ohio.....	4638	4288	17	332	1 4116	236 86	75 15	2	19	8	3	15	57	2	2
Oregon.....	206	179	3	24	172	6 5	6 2	2	1	1	1	2	3	8	8
Pennsylvania.....	4843	4483	37	321	2 4360	213 93	73 3	1	21	9	2	7	21	2	2
Rhode Island.....	260	211	11	36	2 239	3 7	3 1	1	1	1	1	1	1	1	1
South Carolina.....	789	725	1	63	775	1 6	1 2	2	2	2	1	1	1	1	1
Tennessee.....	2220	2071	3	146	2171	17 13	8 3	3	2	1	2	1	2	2	2
Texas.....	1906	1845	1	60	1825	43 4	10 6	2	6	6	1	6	1	1	1
Utah.....	46	39	.....	7	33	1	8	1	1	1	1	1	1	1	1
Vermont.....	569	518	2	49	549	3	1	1	1	1	1	1	16	2	2
Virginia.....	2126	1825	5	183	113 2105	7 4	8	.....	1	1	1	1	1	1	1
Washington.....	43	38	.....	5	31	2 1	4	.....	1	1	1	1	2	2	2
West Virginia.....	612	550	.....	61	583	14 5	6 3	.....	1	1	1	1	1	1	1
Wisconsin.....	915	837	6	72	669	105 18	40 6	14	4	13	18	26	26	2	2
Wyoming.....	24	23	.....	1	19	2	1	.....	2	1	2	2	2	2	2
Total.....	62383	57573	374	4285	151 55520	2362 913	983 268	82	308	132	32	201	793	193	193

The enumeration in the preceding table was made with no restrictions, parties representing themselves as belonging to or engaged in any occupation or profession they might choose to name. It is, therefore, not to be wondered at that the medical profession so enrolled numbers 62,383, several thousand more (12,383) than was returned for the same year by the United States Assessor of Internal Revenue. In the latter case the physicians were required to pay an internal revenue tax of ten dollars on their professional vocation, and numbered 50,000, distributed over the several States and Territories.

Table II, with its classification, is made up from the official returns of the United States Assessor, now in my possession, and accessible to any person desiring to see them.

TABLE II.—*Exhibits the number and classification of the Medical Profession in each State and Territory of the United States, who paid the Internal revenue Tax of ten dollars on the professional vocation for the year ending June 30, 1870, as returned by the U. S. Assessors :*

STATES AND TERRITORIES.	Regular Physi- cians.	Homœopathic.	Hydropathic.	Eclectic.	Miscellaneous, or not classi- fied.	Total number of Physi- cians.
Alabama	853	5	.....	.....	.....	858
Arizona	20	.....	.....	.....	.....	20
Arkansas	453	4	2	4	518	981
California	643	31	9	33	89	805
Colorado	40	2	.....	5	6	53
Connecticut	430	46	2	47	56	581
Dakota	15	2	1	.....	2	20
Delaware	113	14	1	7	3	138
District of Columbia	174	7	.....	5	14	200
Florida	139	.....	.....	.....	.....	139
Georgia	649	69	4	37	226	985
Idaho	19	.....	.....	1	1	21
Illinois	3,202	267	11	406	329	4,215
Indiana	2,463	115	3	358	221	3,161
Iowa	1,139	95	16	146	218	1,614
Kansas	443	7	.....	6	164	620

TABLE II.—Concluded.

STATES AND TERRITORIES.	Regular Physi- cians.	Homœopathic.	Hydropathic.	Eclectic.	Miscellaneous, or not classi- fied.	Total number Physicians.
Kentucky	1,996	41	2	60	99	2,198
Louisiana	560	18	.....	2	21	601
Maine	527	45	1	29	54	656
Maryland.....	961	23	.....	14	76	1,074
Massachusetts.....	1,120	190	3	136	432	1,881
Michigan.....	1,274	204	3	162	219	1,862
Minnesota	320	38	6	16	63	443
Mississippi	646	13	2	29	18	708
Missouri.....	2,140	67	3	124	149	2,483
Montana.....	22	2	.....	.....	11	35
Nebraska.....	117	8	.....	18	50	193
Nevada.....	52	3	.....	1	13	69
New Hampshire.....	371	32	3	43	38	487
New Jersey.....	750	102	4	30	67	953
New Mexico.....	21	.....	1	1	1	24
New York.....	4,153	601	28	278	514	5,574
North Carolina.....	811	3	.....	13	38	865
Ohio.....	3,032	263	16	378	364	4,053
Oregon.....	143	5	.....	9	22	179
Pennsylvania	3,392	357	7	168	249	4,173
Rhode Island.....	134	33	.....	23	67	257
South Carolina.....	583	1	1	.....	1	586
Tennessee	1,434	24	2	64	81	1,528
Texas.....	1,186	21	2	22	49	1,280
Utah.....	9	1	.....	7	1	18
Vermont	392	46	.....	38	38	514
Virginia.....	1,195	4	.....	6	18	1,223
Washington.....	26	1	.....	7	7	41
West Virginia	401	16	.....	69	95	581
Wisconsin.....	645	129	4	54	127	959
Wyoming	8	.....	.....	1	3	12
Total.....	39 219	2,955	137	2,857	4,832	50,000

It is a question of some interest to know the mode and channels through which the medical profession is recruited. There were in the United States, in the winter of 1870-71, of all Schools, 101 medical teaching bodies, classified as follows: Regular medicine, 77, of which 16 taught pharmacy; 8 Homœopathic, 8 Dental, 6 Eclectic, and 2 Botanic.

Table III shows the whole number of matriculants and graduates in 61 colleges in the spring of 1871, compiled from data mainly collected by direct correspondence with the colleges. A few of the institutions did not reply, but had, no doubt, both matriculants and graduates, so that the figures here given are below the actual number in the Medical Colleges of our country.

TABLE III.—Number of Matriculants and Graduates in the Medical Colleges of the United States for the Sessions ending in the spring of 1870-71.

NAME OF COLLEGE.	LOCATION.	No. of Matriculants.	No. of M. D. Degrees.	No. of Ad eun-dem Degrees.	Hon. Degrees.
Alabama Medical College.....	Mobile, Ala.....	56	16	.....	...
Albany Medical College.....	Albany, N. Y....	93	36	.....	1
Atlanta Medical College.....	Atlanta, Ga.....	51	23	5	...
Bellevue Hospital Medical College.....	New York.....	420	99	35	...
Bowdoin Medical College.....	Brunswick, Me...	67	27	.....	...
Chicago Medical College.....	Chicago, Ill.....	107	24	4	2
Chicago Home Hospital Med. College..	Chicago, Ill.....	12	4	.....	...
Cincinnati College of Med. and Surg..	Cincinnati, O..	101	40	.....	2
College of Physicians and Surgeons...	New York.....	325	85	.....	...
College of Physicians and Surgeons...	Keokuk, Iowa...	85	34	.....	...
Dartmouth College, Medical Depart...	Hanover, N. H..	44	16	.....	...
Detroit Medical College.....	Detroit, Mich..	61	30	.....	...
Galveston Medical College.....	Galveston, Tex	42	13	6	1
Geneva Medical College.....	Geneva, N. Y..	32	6	.....	1
Harvard University.....	Boston, Mass...	301	61	.....	...
Howard University.....	Washington.....	48	5	.....	1
Indiana Medical College.....	Indianapolis...	73	29	1	2
Iowa State University, Med. Depart...	Iowa City, Ia...	39	3	.....	...
Jefferson Medical College.....	Philadelphia...	411	127	.....	...
Kansas City College of Phy's & Surg..	Kansas, Mo.....	22	9	.....	...
Long Island Medical College.....	Brooklyn, N. Y	.....	34	.....	...
Louisville Medical College.....	Louisville, Ky.	104	34	3	1
Lewiston Medical School.....	Lewiston, Me...	.....	.....	.....	...
Medical College of Georgia.....	Augusta, Ga...	103	.....	1	...
Medical College of Ohio.....	Cincinnati, O..	.....	.....	.....	...
Medical College of South Carolina.....	Charleston, S. C	.....	.....	.....	...
Medical College of Virginia.....	Richmond, Va.	27	13	.....	...
Medical Department Georgetown Col...	Washington.....	86	16	.....	...
Medical College of Kansas City.....	Kansas City, Mo	18	.....	.....	...
Memphis Medical College.....	Memphis, Ten.	.....	.....	.....	...
Miami Medical College.....	Cincinnati, O..	157	48	5	...
Missouri Medical College.....	St. Louis, Mo...	40	22	5	...
National Medical College.....	Washington.....	54	9	.....	1

TABLE III.—Concluded.

NAME OF COLLEGE.	LOCATION.	No. of Matriculants	No. of M. D. Degrees.	No. of Ad eundem Degrees	Hon. Degrees.
Mew England Female Med. College....	Boston, Mass....	26	4	.....	...
New Orleans School of Medicine.....	N. Orleans, La.....	.....	.....	.....	...
Portland Medical School.....	Portland, Me....	14	.....	.....	...
Rush Medical College.....	Chicago, Ill....	255	85	4	2
Savannah Medical College.....	Savannah, Ga....	10	2	.....	...
Starling Medical College.....	Columbus, O....	57	15	.....	1
St. Louis Medical College.....	St. Louis, Mo....	162	41	4	...
St. Paul Medical College.....	St. Paul, Minn....	.....	.....	.....	...
Toland Medical College.....	San Francisco....	.....	.....	.....	...
University of Buffalo.....	Buffalo, N. Y....	101	37	2	...
University City of New York.....	New York.....	251	90	.....	...
University of East Tennessee.....	Knoxville, Ten....	.....	.....	.....	...
University of Louisville, Med. Dep....	Louisville, Ky....	242	75	3	...
University of Louisiana.....	N. Orleans, La....	206	69	.....	...
University of Maryland.....	Baltimore, Md....	172	52	.....	1
University of Michigan.....	Ann Arbor, Mich	315	84	.....	...
University of Nashville.....	Nashville, Ten....	203	66	.....	...
University of the Pacific.....	San Francisco....	.....	.....	.....	...
University of Pennsylvania.....	Philadelphia....	310	118	.....	...
University of South Carolina.....	Charleston, S. C....	23	1	.....	...
University of Wisconsin.....	Madison, Wis....	.....	.....	.....	...
University of Wooster.....	Cleveland, O....	58	25	.....	...
University of Virginia.....	Charlottesville....	35	15	.....	...
University of Vermont.....	Burlington, Vt....	48	16	.....	...
Willamette University.....	Salem, Oregon....	14	6	.....	...
Woman's Med. Col., N. Y. Infirmary..	New York.....	35	6	.....	...
Woman's Med. College of Pennsylv'a..	Philadelphia....	57	17	.....	...
Yale Medical College.....	N. Haven, Con....	33	11	1	...
Washington University, Med. Dep't....	Baltimore, Md....	170	39	.....	...
		5776	1698	79	16

The annual accession to the ranks of the medical profession of our country through American colleges, as shown by Table III, is, Doctors of Medicine, 1698; Ad eundem Degrees, 79; Honorary 16, and 5,776 Matriculants attending college. If the returns were complete from all colleges it would probably reach 2,000 graduates, and perhaps 6,500 in attendance on lectures. American graduates in foreign universities reach say 20. The immigration of foreign born and educated physicians

settling in the United States is not less than 200. Self-constituted and irregular practitioners, who do not seek degrees, reach, at a low estimate, 200, which makes it probable that the annual increase of the profession of the whole country is 2,500. Table I shows that the whole profession of the United States numbers 62,383. Table V shows that the average age at which medical men begin the active duties of their profession is about $24\frac{1}{2}$ years. Table VI shows that the average age at which professional men of the United States die is about $58\frac{3.9}{100}$ years. Table VIII shows, while the whole number of the profession was 62,383, there was the same year a mortality in the profession of 947, which is probably less than the actual number. With these figures, an approximate estimate may be formed of the annual increase and annual death rate of the medical profession of the United States. It is also a matter of interest to inquire as to the actual time spent by medical students in acquiring a knowledge of their profession. Although the data here given is reliable, having been obtained through Prof. Jos. Carson, from the official records of the University of Pennsylvania, it presents too high an average of the years of study, prior to graduation, to make it probable that the figures would hold good in other colleges.

Table IV shows the number of years spent in medical studies by 1,517 graduates of the University of Pennsylvania.

TABLE IV.—Showing the period of professional studies of 1,517 graduates, prior to their receiving the degree of M. D. at the University of Pennsylvania, from 1860 to 1871, inclusive.

No. of Graduates.	Years of Study.	Months of Study.	No. of Graduates.	Years of Study.	Months of Study.
1*	2	5	4	9	...
10*	2	6	4	10	...
4*	2	8	5	12	...
1029	3	...	2	13	...
63	3	4	1	16	...
151	3	6	1	18	...
16	3	9	2	20	...
143	4	6	1	21	...
10	4	...	1	23	...
32	5	...	1	26	...
16	6	...			
12	7	...	1517	223	8
8	8	...			

Average nearly $6\frac{1}{2}$ years.

To follow out this feature of the inquiry as to the years spent in study, the next question that presents itself is, to ascertain what is the average age at which medical men receive the degree of M. D.

Table V is intended to show this, and is also made up from data obtained from the official records of the University of Pennsylvania, and presents perhaps a fair statement of the average ages of medical graduates in the other Medical Institutions of our country.

* The 15 graduating under three years' course of study were permitted to do so by special ordinance of the Trustees of the College, in 1863, to enable these individuals to accept professional appointments in the army. Those whose studies extended over four years were chiefly such as had entered upon the practice, and many of them, after attending one course of Lectures in the Institution, returned subsequently to graduate.

TABLE V—Showing the actual ages at which 1506 Students graduated M. D. in the University of Pennsylvania from 1860 to 1871 inclusive.

Number of Graduates.	Ages at Graduation.	Aggregate of Ages.	Number of Graduates.	Ages of Graduation.	Aggregate of Ages
3	under 21	61	16	34	340
294	21	6,174	5	35	175
233	22	5,126	7	36	252
275	23	6,325	5	37	185
202	24	4,848	7	38	266
150	25	3,750	5	39	195
92	26	2,392	4	40	160
72	27	1,944	1	41	41
45	28	1,260	5	42	210
21	29	609	4	44	176
31	30	930	1	45	45
14	31	434	3	50	150
12	32	384			
5	33	165	1,506		36,597

Average $24\frac{1}{2}$ years, nearly.

In the Miami Medical College, Cincinnati, Ohio, Class 1871-72, the average age of 89 students at commencement of professional studies, was $21\frac{1}{2}$ years. Average of 26 of the graduates $26\frac{1}{2}$ years.

National Medical College, Washington, D. C., Class 1871-72, average age of whole class 25 years. Average age of graduates 28 years.

Having considered the number of years spent in professional studies, and also the average age at which medical men receive their diploma and enter upon their labors, I will present, in table VI, a record of the actual ages at which 2000 American physicians died. This data was collected with much care by myself from unpublished biographical matter in my possession. It furnishes some facts on which to form an opinion as to the probable age to which the average of physicians will live.

I am, however, inclined to believe that the age, $58\frac{1}{2}$

years, nearly, here given, is too great from the fact that young physicians are less apt to have a biographer than the old, and are therefore out of proportion in this collection of biographies referred to. But as it is authentic, and the most extensive list of the kind that I know of, it is here given. It will be readily seen, by contrasting the average age at which medical men enter upon the duties of their profession, and the average age at which American physicians die, that a physician has a prospect of being able to spend about 34 years in the active labor of his profession.

TABLE VI—Gives the actual ages at which 2,000 American Physicians died, collected from various records in my own possession.

No. Dying.	Ages.	No. Dying.	Ages.	No. Dying.	Ages.
1	21	32	49	31	77
4	22	42	50	26	78
6	23	28	51	19	79
6	24	34	52	36	80
15	25	25	53	16	81
18	26	32	54	27	82
15	27	28	55	25	83
31	28	35	56	28	84
18	29	29	57	26	85
24	30	40	58	19	86
31	31	37	59	12	87
30	32	53	60	13	88
30	33	38	61	5	89
22	34	39	62	11	90
25	35	43	63	3	91
34	36	31	64	7	92
25	37	43	65	3	93
27	38	34	66	1	94
28	39	30	67	3	95
30	40	26	68	2	96
22	41	51	69	3	97
19	42	53	70	1	98
19	43	35	71	1	99
29	44	48	72	1	100
24	45	34	73	2,000	
38	46	36	74		
36	47	38	75		
38	48	42	76		

The average age of these 2,000 physicians is found to be $58 \frac{39}{100}$ years.

RECAPITULATION OF THE FOREGOING TABLE.

Mortality between 21 and 30.....	114
“ “ 30 “ 40.....	276
“ “ 40 “ 50	287
“ “ 50 “ 60.....	330
“ “ 60 “ 70.....	388
“ “ 70 “ 80.....	362
“ “ 80 “ 90.....	207
“ “ 90 “ 100.....	35
“ “ 100	1

Average age $58\frac{3}{10}$ years. 2,000

There is a much greater number of persons occupied as special helpers or aids to the physicians of our country than is generally supposed. According to the reports in the late census there are 40,170, occupied as follows :

Apprentices to the learned professions.....	386
Apprentices to Dentists	166
Chemists, (practicing).....	608
Chiropodists.....	65
Dentists.....	7,839
Midwives	1,186
Nurses.....	10,797
Vetrinary Surgeons.....	1,166
Druggists, and trades in medicine.....	17,369
Patent Medicine manufacturers.....	409

Total..... 40,170

There is also one channel, though an inconsiderable one as to the actual numbers admitted through it to the ranks of the profession in this country, which has not yet been considered, namely, through foreign emigration. Table VII is compiled from data given by Edward Young, Chief of the Bureau of Statistics, in his special report of 1872, in immigration to the United States. The better to contrast the extent and influence of immigration upon our profession, I have included in the table

the whole number of foreigners belonging to the three learned professions who have come over to our country within the last fifty years, with a view to a permanent residence.

TABLE VII.—Shows the total number of Passengers belonging to the three learned Professions—Clergymen, Lawyers and Physicians, that arrived in the United States from 1820 to 1870, inclusive, with a proportioned deduction for American Citizens.

PROFESSION.	1820 to 1830	1821 to 1840	1841 to 1850	1851 to 1860	1861 to 1870	Aggregate.	Average Annual Accession by Immigration.
Clergymen.....	415	932	1559	1420	3117		
Deduct Am. Citizens returning	58	55	47	128	342	630	
Actual Immigrants.....	357	877	1512	1292	2775	6831	136
Lawyers.....	244	461	831	1140	1545		
Deduct Am. Citizens returning	34	28	24	102	170	358	
Actual Immigrants.....	210	433	807	1038	1375	3863	77
Physicians.....	805	1959	2116	2229	3244		
Deduct Am. Citizens returning	112	117	63	200	357	849	
Actual Immigrants.....	693	1842	2053	2029	2887	9504	190

To still further enable the mind to comprehend the strength and distribution of the medical profession throughout the United States at different periods, I have arranged Table VIII, so as to show the strength of each of the three learned professions at the three decennial periods of 1850, 1860 and 1870, in each State and Territory, as given from data furnished by the different census reports. This table also exhibits the proportional strength of each profession to the whole population of each State and Territory, and the mortality in each for the year 1870.

TABLE VIII.—Exhibiting the numerical strength of the three learned professions, Theology, Law and Medicine, in the United States, compiled from the three last decennial census reports, with the proportion each bear to the whole population in every State and Territory in 1870; also, the mortality of each Profession in the different States and Territories for the year 1870.

States and Territories.	Profession.	1850	1860	1870	Proportion of each to population 1870.	Total mortality in each for 1870.
Alabama.....	Clergymen.....	702	877	821	1204.	19
	Lawyers.....	570	763	758	1305.	14
	Physicians.....	1264	1760	1418	703.	30
Arizona.....	Clergymen.....	.....	.....	.....	7 1399.7	.....
	Lawyers.....	.....	.....	21	459.9	.....
	Physicians.....	.....	.....	22	439.	.....
Arkansas.....	Clergymen.....	233	494	397	1220.	2
	Lawyers.....	224	467	413	1173.	9
	Physicians.....	449	1222	1026	481.8	11
California.....	Clergymen.....	36	348	569	984.6	17
	Lawyers.....	191	894	1115	502.4	29
	Physicians.....	626	1138	1257	445.7	28
Colorado.....	Clergymen.....	.....	11	54	737.	.....
	Lawyers.....	.....	89	99	402.6	3
	Physicians.....	.....	116	70	569.5	4
Connecticut.....	Clergymen.....	705	878	908	591.9	10
	Lawyers.....	289	468	391	1374.5	9
	Physicians.....	560	716	680	790.3	14
Dakota.....	Clergymen.....	.....	4	16	886.	.....
	Lawyers.....	.....	8	23	616.	5
	Physicians.....	.....	.....	20	709.	.....
Delaware.....	Clergymen.....	79	110	150	833.	4
	Lawyers.....	46	87	84	1488.	1
	Physicians.....	114	154	170	735.	.....
Dist. Columbia...	Clergymen.....	94	71	174	756.9	.....
	Lawyers.....	99	189	411	320.4	6
	Physicians.....	104	148	326	404.	1
Florida.....	Clergymen.....	83	159	197	953.	7
	Lawyers.....	131	173	149	1260.	5
	Physicians.....	135	268	248	757.	4
Georgia.....	Clergymen.....	715	1015	953	1242.	15
	Lawyers.....	711	1168	851	1390.	12
	Physicians.....	1295	2004	1537	770.	30
.....	Clergymen.....	.....	.....	6	2499.9	.....
	Lawyers.....	.....	.....	42	357.	3
	Physicians.....	.....	.....	33	454.	.....
Illinois.....	Clergymen.....	1023	1880	3192	795.	33
	Lawyers.....	817	1602	2683	946.	31
	Physicians.....	1402	2867	4862	522.	45

TABLE VIII.—Continued.

States and Territories.	Profession.	1850	1860	1870	Proportion of each to population 1870.	Total mortality in each for 1870.
Indiana.....	Clergymen.....	1063	1459	1787	940.	27
	Lawyers.....	924	1219	1685	997.	17
	Physicians.....	2170	2540	3613	465.	35
Iowa.....	Clergymen.....	248	1208	1596	746.	19
	Lawyers.....	272	1161	1456	818.	8
	Physicians.....	542	2552	1865	639.	29
Kansas.....	Clergymen.....	.....	207	538	677.	9
	Lawyers.....	.....	361	682	534.	6
	Physicians.....	.....	376	906	402.	10
Kentucky.....	Clergymen.....	931	1150	1080	1223.	10
	Lawyers.....	995	1190	1552	850.	20
	Physicians.....	1818	2198	2414	547.	32
Louisiana.....	Clergymen.....	229	333	404	1799.	8
	Lawyers.....	622	689	663	1096.	13
	Physicians.....	912	1149	939	774.	20
Maine.....	Clergymen.....	928	1059	890	715.	12
	Lawyers.....	560	646	558	1121.	12
	Physicians.....	659	798	818	766.	13
Maryland.....	Clergymen.....	453	731	938	831.	13
	Lawyers.....	535	599	772	1011.	16
	Physicians.....	990	1108	1257	621.	23
Massachusetts....	Clergymen.....	1662	1913	2040	714.	41
	Lawyers.....	1111	1186	1270	1147.	30
	Physicians.....	1643	1821	2047	711.	42
Michigan.....	Clergymen.....	557	1046	1430	828.	17
	Lawyers.....	560	791	1167	1014.	23
	Physicians.....	854	1285	2034	582.	23
Minnesota.....	Clergymen.....	32	311	620	709.	10
	Lawyers.....	23	407	449	979.	2
	Physicians.....	13	252	402	1093.	2
Mississippi.....	Clergymen.....	471	693	749	1105.	7
	Lawyers.....	590	620	632	1310.	14
	Physicians.....	1217	1708	1511	547.	20
Missouri.....	Clergymen.....	814	1280	1739	989.	30
	Lawyers.....	687	1187	3452	498.	13
	Physicians.....	1351	2543	3560	483.	40
Montana.....	Clergymen.....	.....	.....	19	1084.	.....
	Lawyers.....	.....	.....	23	895.	1
	Physicians.....	.....	.....	42	490.	1
Nebraska.....	Clergymen.....	.....	57	183	672.	2
	Lawyers.....	.....	130	204	602.	2
	Physicians.....	.....	127	247	498.	1
Nevada.....	Clergymen.....	.....	.....	35	1214.	.....
	Lawyers.....	.....	18	166	262.	2
	Physicians.....	.....	21	110	386.	1

TABLE VIII.—Continued.

States and Territories.	Profession.	1850	1860	1870	Proportion of each to population 1870.	Total mortality in each for 1870.
New Hampshire	Clergymen.....	649	641	664	479.	10
	Lawyers.....	326	375	349	820.	10
	Physicians.....	623	591	565	563.	20
New Jersey.....	Clergymen.....	650	856	1236	733.	15
	Lawyers.....	412	537	888	1020.	13
	Physicians.....	608	865	1208	750.	20
New Mexico.....	Clergymen.....	24	37	51	1801.	.....
	Lawyers.....	11	23	48	1914.	1
	Physicians.....	9	14	27	3402.	.....
New York.....	Clergymen.....	4290	5235	5678	722.	72
	Lawyers.....	4263	5592	5913	743.	114
	Physicians.....	5060	6390	6810	642.	136
North Carolina..	Clergymen.....	747	907	861	1244.	16
	Lawyers.....	399	500	574	1866.	10
	Physicians.....	1083	1266	1143	937.	15
Ohio.....	Clergymen.....	2440	2927	3572	746.	46
	Lawyers.....	2028	2537	2563	1039.	31
	Physicians.....	4263	4238	4638	574.	66
Oregon.....	Clergymen.....	29	125	162	561.	3
	Lawyers.....	22	104	194	468.	.....
	Physicians.....	45	115	206	441.	5
Pennsylvania....	Clergymen.....	2789	3396	3841	916.	57
	Lawyers.....	2503	2414	3253	1082.	50
	Physicians.....	4071	4399	4843	727.	94
Rhode Island....	Clergymen.....	193	231	250	869.	2
	Lawyers.....	114	96	163	1332.	1
	Physicians.....	217	225	260	836.	5
South Carolina..	Clergymen.....	474	586	553	1458.	13
	Lawyers.....	397	457	337	1823.	7
	Physicians.....	905	1116	789	894.	10
Tennessee.....	Clergymen.....	1081	1186	1256	1002.	13
	Lawyers.....	725	1037	1126	1117.	17
	Physicians.....	1523	2240	2220	566.	23
Texas.....	Clergymen.....	308	758	831	985.	9
	Lawyers.....	429	904	1027	797.	9
	Physicians.....	616	1476	1906	429.	33
Utah.....	Clergymen.....	3	12	47	1846.	1
	Lawyers.....	5	8	23	3904.	.....
	Physicians.....	16	14	46	1886.	.....
Vermont.....	Clergymen.....	619	631	591	559.	9
	Lawyers.....	494	.....	72	4591.	4
	Physicians.....	663	594	569	580.	9
Virginia.....	Clergymen.....	1087	1437	1073	1141.	23
	Lawyers.....	1384	1341	1075	1139.	15
	Physicians.....	2163	2607	2126	576.	35
Washington.....	Clergymen.....	.....	26	50	478.	.....
	Lawyers.....	.....	22	56	428.	.....
	Physicians.....	.....	22	43	557.	1

TABLE VIII.—Concluded.

States and Territories,	Profession.	1850	1860	1870	Proportion of each to population.	Total mortality in each for 1870.
West Virginia ...	Clergymen.....	.....	.....	466	948.	7
	Lawyers.....	.....	.....	400	1105.	3
	Physicians.....	.....	.....	612	722.	4
Wisconsin.....	Clergymen.....	401	1243	1189	887.	18
	Lawyers.....	471	1133	785	1345.	12
	Physicians.....	581	1110	915	1043.	22
Wyoming.....	Clergymen.....	.....	.....	11	829.	1
	Lawyers.....	.....	.....	25	365.	.....
	Physicians.....	.....	.....	24	380.	.....
Total No. of each	Clergymen.....	.....	.....	43874	878.	571
	Lawyers.....	.....	.....	40736	946.	552
	Physicians.....	.....	.....	62383	618.	947

NOVEL SURGICAL CASE.

BY J. R. WEIST, M. D., RICHMOND, IND.

On the evening of January 25, 1873, I was requested by Dr. Robbins, of Abington, to see Mr. W. in consultation. On visiting the patient I learned the following history: "On the morning of the 23d, Mr. W. having some affection of the rectum, that he called "*piles*," proceeded to put in practice a remedy for his disease that he stated had many times before proved successful. Taking a piece of "*corn-cob*" two and a half inches long and three-fourths of an inch in diameter, he inserted into the end a part of a willow branch, to serve as a handle. The cob was then covered with common brown paper that was held in place by a string tied around the handle. Oiling the bougie thus prepared, he passed it into the rectum for the purpose of "breaking the piles." By some mischance the connection between the

cob and the handle was broken, and the former, with its covering of paper, remained in the bowel. Becoming alarmed, another piece of wood was covered with paper, oiled, and passed into the rectum, for the purpose of discovering and removing the lost instrument. The means employed were unsuccessful, but great pain in the abdomen and nausea followed. The alarm and distress increasing, Dr. Robbins was called. Mr. W. concealing the facts from the Doctor, stated that a little paper had passed into his rectum. Not supposing any serious trouble present, the Doctor simply prescribed some anodyne medicine and left. In the evening he was again called. Great pain continued, with nausea and vomiting. Now for the first time was Dr. R. informed of the accident that had befallen his patient. A rectal examination was at once made, but no foreign body could be found! This examination was repeated several times during the next forty-eight hours, with the same negative result, while despite the treatment employed the patient continued to grow worse."

My examination of the patient was made sixty hours after the accident. I found Mr. W. to be a man of fair physical development, and about fifty years of age. He was rational but in a very low state. The belly was tympanic, tender and painful; efforts at vomiting were frequent; hiccough was very distressing; pulse quiet and weak; skin cold and clammy.

Notwithstanding the apparent hopeless condition of the case, it seemed proper to make an effort to remove the offending body from the rectum. Dr. Robbins having brought the patient fully under the influence of an anæsthetic, I had him placed in a lithotomy position, and after emptying the bladder with the catheter, proceeded to examine the rectum. First one finger, then two, failed to discover a foreign body. Gradually dilatation was practiced until the entire hand was introduced into the rectum, then the index finger just reached the intruder.

It was soon discovered that the foreign body was in the sigmoid flexure of the colon, the capacity of this was greatly increased, and the corresponding portion of the bowel dislocated toward the right side. The foreign body itself was lying at an acute angle to the rectum, the smaller end pointing downward, and the larger in such a position that the finger must pass out of the rectum at a right angle in order to touch it. Considerable effort was made by use of lithotomy and placenta forceps to seize the body, without success. A portion of the paper covering projecting below the lower end of the cob was caught and removed. Failure resulted from two causes. The hand in the rectum was so cramped as to nearly render powerless the fingers. It was impossible to make any instrument I had, pass out of the rectum at the required angle, and—as it were—down into a pocket.

The friends were informed of the hopelessness of the case, and the patient put to bed. The effects of the anæsthetic passed away in a reasonable time, but the patient continued to sink, being eighty-four hours after the accident.

Thirty hours after death, I made a post mortem examination. Marked evidence of general peritonitis was found everywhere in the abdomen. All the parts being agglutinated by a deposit of lymph. The sigmoid flexure of the colon was found to the right of the medium line, and partly within and partly without this part of the bowel was found the novel bougie. Through a rent in the most depending part of the curve of the bowel, an inch and a half of the instrument projected. This, when removed, was found to be four inches in length. The cob, covered by paper, being two and a half inches long by one and a quarter inches in diameter, and the remaining portion of the handle one and a half inches long by one-fourth of an inch in diameter. The free end of this was much twisted and splintered, indicating that the instrument had been roughly used after its introduction into the bowel.

Proceedings of Societies.

BRAINARD MEDICAL SOCIETY.

The Society met in Winamac, April 3, 1873. Dr. Kelsey was chosen President, *pro tem*.

Dr. LeRoy Rogers, of Marmont, Marshall county, was elected a member.

On motion of Dr. F. B. Thomas, the Society proceeded to elect officers, which resulted as follows:

President—I. B. Washburn, Logansport.

Vice President—W. H. Thompson, Winamac.

Secretary—J. W. C. Eaton, Pulaski.

Treasurer—Wm. Kelsey, Monterey.

Censors—H. E. Pattison, Star City; W. T. Cleland, Kewana; L. D. Glazebrook, San Pierre.

Delegates to the State Medical Society—Doctors Washburn, Bell, W. H. Thompson, Glazebrook and Kelsey.

Dr. Kelsey made a report of cases of "brain fever," or cerebro-spinal meningitis. His treatment consisted of stimulants, tonics and alteratives. He lauded very highly the effects of Fowler's Solution in cases where there was—as a result of the disease—strabismus, paralysis, or defibrinated condition of the blood. He said he could not give its *modus operandi*, but he knew the results were good. He said that the cases that he had handled during the past winter, (eleven in number), were not of as malignant a character as those of 1872.

The discussion was earnest and interesting because all present participated.

Adjourned to meet at Winamac, June 10, 1873.

I. B. WASHBURN, Sec'y.

Reviews.

DISEASES OF THE URINARY ORGANS, including strictures of the urethra affection of the prostate and stone in the bladder, by John U. S. Gouley, M. D., late Prof. of Clinical Surgery and Genito-urinary Diseases, in the Medical Department of the University of the city of New York, etc. Robert Clarke & Co., Cincinnati; William Wood & Co., 27 Great Jones St., New York.

This excellent work purports to be upon the diseases of the urinary organs. It has, however, a more particular reference to the surgery of those organs, and upon a casual reading, seems to be a full and complete expose of such matters.

ILLUSTRATIONS of the influence of the mind upon the body in health and disease; designed to elucidate the action of the imagination, by Daniel Hock Tuke, M. D., M. R. C. P. joint author of "Manual of Psychological Medicine," etc. Robert Clarke & Co., Cincinnati; Cathcart & Cleland, Indianapolis.

The work is full of example illustrations of the subject discussed, and taken as a work of reference of "strange cases" alone, it is invaluable to the psychologist and physician.

THE MECHANISM OF THE OSSICLES OF THE EAR AND MEMBRANE TYMPANI, by J. H. Helmholtz, Prof. of Physiology in the University of Berlin, Prussia. Translated from the German with the author's permission, by Albert H. Buck and Normand Smith, of New York, with twelve illustrations. William Wood & Co., 27 Great Jones St., New York.

This is really a very scholastic work. The anatomical, physiological and mathematical aspect of the question is fully considered, and there seems to be but little or nothing left to be said upon the subject.

THE PRACTICE OF SURGERY, by Thomas Bryant, F. R. C. S. Surgeon of New York Hospital, with five hundred and seven illustrations. H. C. Lea, Philadelphia; Robert Clarke & Co., Cincinnati; Cathcart & Cleland, Indianapolis.

A very good practical work, "A Manual of the Prac-

tice of Surgery," it deals only with essentials and principals. "It is not intended to compete with such valuable works as "Paget's Surgical Pathology, and Holmes' System," so says the author's modest preface. Notwithstanding this, it is full and complete as regards the points discussed and examined.

Miscellaneous.

PUNCTURING CLOSED CAVITIES—BLADDER—HERNIAL SACS—ABSCESSSES, &c.—Dr. H. R. Clark mentions, in the *Medical Record*, a case of retention of urine from enlarged prostate. On failing to pass a catheter into the bladder, he resorted to puncturing that organ above the pubis, with a trocar and canula of the size of *one-twelfth* of an inch. Several punctures were made, and the canula was withdrawn as soon as the bladder was emptied. Soon after this the parts relaxed and permitted the passage of a catheter with ease.

Dr. J. L. Little, in the New York *Medical Journal*, records a similar case, where he punctured the bladder in the same region with an aspirator 64 times. Both cases did well. I remember in my young days of seeing an old country doctor puncture the bladder of an old man, with a small trocar, for retention. This case did well too. Puncturing the knuckle of intestine in irreducible strangulated hernia is now becoming a very frequent operation, resulting in the most desirable manner. Several cases have been reported of late, wherein strangulated hernias were reduced after puncture of the strangulated knuckle of the gut, by M. Demarquay, of Paris, and D. Chanveau, of Courtelain, and several others. A few years ago six cases were reported of reduction of the strangulated gut, by the introduction of

the canula of a large hypodermic syringe into the cavity of the strangulated knuckle, and the barrel, with the piston pushed down, was then attached to the canula, when the piston was withdrawn, and in this way the fluid and gaseous contents of the strangulated knuckle were removed, and the hernia afterwards yielded to gentle pressure. All these six cases, so far as my recollection goes, were successful. I have two others so treated, and with the desired results. It is evident that the great advantage offered by the hypodermic syringe, as well as the aspirator, in the successful treatment of hernia, by drawing off the fluid and gaseous contents of the strangulated gut, and thus facilitating its reduction, should give it preference in all cases when the usual means have failed to reduce the strangulated gut, and before the hazards of an operation are entered upon. I have been told by two old country practitioners that each of them had succeeded in reducing a case of strangulated hernia by puncturing the knuckle with a small trocar canula. One of them used a rather ingenious contrivance to effect his object. The rim or flange of the canula was cut off, and, after it was passed into the gut, a small rubber bulb, lightly wrapped with a string, so as to express the air, was slipped over the canula, and the string removed, so as to allow the bulb to expand, and exhaust the cavity of the gut of its contents. Both of the cases were successful. In the country any of these contrivances are handy, and might, with happy facility, be put to good use in cases of these kinds. The mortality of hernia operations with the knife are of sufficient enormity to justify the means herein suggested, in the absence of a regular aspirator, before resorting to the operation of herniotomy.

Whenever there is any dangerous collection of fluid, these means may be resorted to for its removal without the incurring of any great risk. In urgent cases of collection of fluid in large quantity in the sac of the peri-

cardium, I should not hesitate to puncture the sac with an aspirator, or, in its absence, with a small trocar and canula of the size used by Dr. Clark (one-twelfth of an inch) rather than risk the probable destruction of the patient by the pressure of the accumulated fluid on the heart. If the canula has its upper end free, so that an exhausted rubber bulb can be attached, a tracor of this size can be put to a multitude of good uses in emergencies.

In every instance after resort to puncturings a full dose of morphia should be given, and the effect kept up by small ones of $\frac{1}{2}$ gr., repeated frequently. This should never be neglected on any occasion. I have repeatedly evacuated carbuncles, and large abscesses, with the hypodermic syringe. In fact, during the last twelve years I have always used this instrument to remove the pus from all localities that the canula could reach. After the pus is removed in this way, I paint the swollen parts with collodion, to which morphia or atropia is added. This gives the film toughness. By this method pus can be removed without causing pain, which is certainly a matter of considerable moment to the humane physician, as well as his patient.—*Med. Archi.*—*Chicago Med. Times.*

BLOOD OF A SUICIDE BY PRUSSIC ACID.—Dr. J. H. Packard presented a specimen of the blood of Geo. S. Twitchell, Jr., who terminated his life by taking hydrocyanic acid. The blood was not coagulated. Dr. Packard stated that he was present at the post-mortem examination, and that on opening the body, a decided odour of prussic acid was exhaled.

It being voted that a committee be appointed to examine this blood and report upon it, the chair appointed Drs. W. W. Keen and H. B. Hare, who submitted, May 13th, 1869, the following report, with experiments:

Report—The committee to whom was referred for examination the specimen presented by Dr. Packard, (viz.,

a bottle of blood of Geo. S. Twitchell, Jr., who poisoned himself at about 3 A. M., April 8, 1869), beg leave to report as follows:—

“The blood was carefully examined the same evening, at from 10 P. M. to 1 A. M., *i. e.*, 10 to 22 hours after death, and at various intervals thereafter. The specimen had been removed from the body at about 4 P. M.

Color: When compared with an ammonical solution of carmine, it presented but little difference save that it was somewhat more dull and opaque. On examining it by daylight the next morning, and comparing it with the carmine, the blood was considerably more of an orange tint.

Smell: None was perceptible.

Fluidity: It was perfectly fluid, so that a number of persons wrote various sentences from time to time with perfect ease. It never coagulated.

Blood crystals were obtained with the greatest ease in the usual manner, and of no unusual appearance.

Hæmin crystals were easily obtained also by evaporation to dryness, and then boiling with acetic acid (glacial). These were obtained both before and after decomposition.

Microscopic Examination.—Five different specimens were examined, from both the superficial and deeper layers with and without shaking.

Red Corpuscles were normal in size, *i. e.*, slightly over $\frac{1}{3000}$ inch. Some few were crenated. When in thick layer they showed a marked tendency to the formation of rouleaux. On the addition of water they paled and became invisible to the highest power we used, *i. e.*, one-fifth. By 10 P. M., Saturday, the red corpuscles were nearly destroyed.

White Corpuscles.—But few were found singly. Frequent collections, composed of from three to ten, were visible, the nuclei being indistinctly marked. Many of the corpuscles seemed to be losing their defined outline, as if disintegrating. Besides the collections of recog-

nized white corpuscles were others which we regarded as aggregations of disintegrated white corpuscles. They varied in size from three to fifteen times that of a white corpuscle. Their outlines were irregular, and the whole mass appeared to consist of granular matter, in some instances so arranged as to present a radiating appearance. This was most marked when they were slightly out of focus. They were very adherent to the glass, pressure sufficient to cause rapid movement of the red corpuscles not altering their position. The granular margins, however, swayed to and fro, sometimes losing small fragments. In color they resembled white corpuscles precisely. Some of the masses possessed a relatively darker centre, resembling a nucleus of varying shape and without defined outline.

Chemical Examination.—Heat applied to the blood to produced instant coagulation of the albumen. No test for HCy showed its presence, nor was anything worthy of note observed.

The first point naturally suggested is whether the HCy interferes with the detection of blood or blood stains. Emphatically it does not. It could be recognized before decomposition or even when dry (as Dr. J. G. Richardson of this city has recently shown) by the red blood corpuscles, after decomposition by hæmin crystals, or by the blood crystals, or by the spectroscope. Specimens of the hæmin crystals, and blood crystals, are herewith shown, the latter prepared by Dr. R. W. Hargadine.

The spectroscopic analysis has been investigated by Stokes, and more lately by Preyer. (*Die Blausaure*, Bonn, 1868, analyzed in the *Glasgow Med. Jour.*, Nov. 1868, p. 70.) When hæmatogloblin dissolved in water is mixed with KCy or HCy and raised to blood heat, or allowed to stand for some time, the absorption bands of oxyhæmatoglobulin are replaced by a single broad band. Probably a combination of the two takes place without loss of oxygen, for a reducing agent replaces this with

another spectrum, and admixture of air causes this to return to the brood band. It might be supposed then that the cyanide destroyed life by such a combination which would destroy the oxygenating power of the red blood corpuscles. This is apparently confirmed by Expt. 3, where the blood mixed with KCy remained black, no oxygenation taking place. Lecorche and Meuriot (*Etude phys. et therap. sur l'Acide Cyanhydrique, Archiv. Gen.* May, 1868, p. 539) state the same fact and note that it requires a strong current of oxygen to reproduce the red color of oxygenation.

But the objection to this view of the poisonous action of HCy is a fatal one, viz: that the spectroscope detects in the blood of persons and animals poisoned by HCy, where no air is added no such bands as those of the compound of the acid with oxyhæmatoglobulin, but only those of hæmatoglobulin without oxygen save in faint traces. If air is admitted then the blood is oxygenated, the bands of oxyhæmatoglobulin appear, and the blood becomes of a bright red. Unfortunately we were unable to make any such spectroscopic test, and must simply state therefore the results of others.

So far as the color, however, shows oxidation, the bright red color of Twitchell's blood, a common appearance, according to Casper, and the reddening noted in Expts. 5 to 7, confirm this view.

The combination of acid with the blood probably accounts also for the absence of the odor of HCy in the blood. In the tissues it is observed, but in the blood it is not. This was so in Twitchell's case, in all the experiments made by us, and is so stated by Preyer, and Lecorche and Meuriot. But though deprived of its odor, the cyanide of oxyhæmoglobulin is none the less fatal, and after death the odor is exhaled freely by the tissues. (Preyer in *Glasgow Med. Jour.*, Nov. 1868, p. 74.)

Lecorche and Meuriot state also, that the blood in such cases resists decomposition longer than usual, p. 541.

As to the coagulation of the blood in cases of poisoning in man, no absolute rule can be stated, but more commonly it is fluid. Guy (*Forensic Med.*, p. 597) says the blood, "though usually fluid, is sometimes coagulated." Taylor says it is "dark colored and liquid." (*Med. Jurisp.*, 8th edition, p. 147.) Casper says it is always fluid. In animals, however it may be in man, our own experiments would go to show the reverse. Twitchell's blood never coagulated. But, on the other hand, in all six of the rabbits poisoned by us, whether by KCy or HCy, the blood coagulated in a few minutes. When mixed with KCy artificially out of the body (Expt. 3), it required a large amount of the acid to prevent clotting, and this too to be added before any coagulation had taken place, otherwise it was of no avail. But when mixed with HCy out of the body in the same proportion, it clotted, even when the animal had been poisoned by HCy. (Expt. 4 and 7.) With these discrepancies we can add no light on the subject, either as to the facts or the cause of the frequent though not invariable fluidity of the blood.

The condition of partial disintegration of the white corpuscles found in Twitchell's blood, and in Expt. 2, we regarded as probably a post-mortem result in no way connected with the poison. To determine this we have endeavored to obtain blood placed in similar conditions from the bodies of persons dying naturally, *i. e.*, blood taken from the body about twelve hours after death and examined some eight or ten hours later. Our inability to do this was the reason of our not reporting at the last meeting of the Society. But though still unable to obtain such specimens, we have thought it advisable, even though incomplete in this respect, not to delay our report any further.

Preyer states that atropia is an antidote to the poison. One of us has made a number of experiments on this subject, and although not within the province of pathol-

ogy, yet we may be pardoned for saying that in all the experiments made, the failure of the antidote has been a signal one. (See *Proc. Biol. ann Micros. Sect. Acad. Nat. Sci.*, for June, 1869.)

In connection with this report, the following summary of other post-mortem appearances than those of the blood, taken from the works of Taylor, Casper, Guy, and Christison, may prove not uninteresting, although the amount of the poison taken, the interval between its reception into the system and the fatal result, as also the time elapsing between the death and the post-mortem examination, while they have a most important bearing on the subject, unfortunately and of necessity have varied so greatly, that it is almost impossible to form any just conclusion as to what may be expected as post-mortem results after poisoning by hydrocyanic acid.

Rigor mortis is usually fairly marked after the fifth hour succeeding death, but not unfrequently it has not been observed at all.

Putrefaction is said to take place somewhat more rapidly than after death from other causes, but Mr. Taylor thinks not, Orfila having shown that all sudden death, *cæteris paribus*, is followed by rapid decomposition. Lécorsche and Meuriot state that the blood decomposes more slowly. The skin is commonly livid or tinged with violet, the nails blue, the fingers not unfrequently clenched, the toes contracted, eyes prominent, glassy and glistening, the pupils dilated.

As a rule there is after death, no evidence of the previous occurrence of convulsive movements, even when in the act of death these may have been present.

On opening the body or any one of its cavities, in many cases the peculiar odor of hydrocyanic acid has been observed, though by no means invariably. It appears that when death has followed the administration of the poison very rapidly, the odor may be discovered on first opening the body, even several days after death.

Where, however, death has been delayed more than fifteen minutes, it has been almost or quite impossible to perceive the odor, even when chemical tests have afterwards revealed the presence of small quantities of the acid. Two causes influence this result, probably, one, that the elimination of this poison being exceedingly rapid, every moment of time aids its escape from the body—the other, that death usually follows large doses much more rapidly than when small ones have been taken—and hence the body contains more poison after the sudden death.

That the odor has not been perceived, is no proof of the absence of the poison. It is certain that many persons can not perceive its presence in the atmosphere, their noses being as it were “odor blind,” and besides, as before stated, not unfrequently the acid is present in the body while no odor can be perceived by any one. On the other hand, there are several substances, themselves free from hydrocyanic acid, which resemble it very closely as regards odor, so that the presence or absence of this, taken alone, should have but little influence in a medico-legal investigation.

It seems agreed that there is usually an engorgement of the venous system, in which, however, the vessels of the brain do not invariably share, as, while Casper gives as a rule (*Forensic Medicine*, vol. ii,) that there is *always* hyperæmia of the cranial contents, four out of the five cases quoted by him show a decided *anæmia* of the vessels of the brain and meninges.

The arteries are usually empty; as is the left side of the heart, which is found contracted. The right side of the heart shares the engorgement of the venous system. *The lungs* vary in condition from great congestion, which is somewhat rare, to a condition of *anæmia*. The stomach, which is generally found to emit a stronger odor than any other part of the body, has at times, after an usually large dose, presented some evidence of slight in-

flammatory action. There is a general congestion of the abdominal viscera.

The *bladder* is sometimes found full, sometimes empty, and this condition has not been shown to be influenced by the amount of poison taken.

Those members of the Society who may have occasion to make examinations in cases of poisoning by hydrocyanic acid, should bear in mind the fact, that inhalation is the most dangerous form of administration, and that the odor has been on more than one occasion so strong, as to seriously affect some of those present.

It should also be remembered that the volatility of the poison is so great, that all specimens which it may be necessary to submit to a chemical investigation, should be very thoroughly secured from access to the air, and be examined as soon as possible.—*Proceedings of the Pathological Society of Philadelphia.*

A CASE OF SPORADIC CHOLERA TERMINATING FATALLY BY SUPPRESSION OF URINE.—Dr. DaCosta made the following remarks:

On the 6th of December, 1867, I was requested by Dr. Keichline to see, with him, Mr. T., a strong, well-built man, forty-eight years of age, and who had then been sick for four days. Mr. T., after eating a hearty supper of terrapins, had been attacked with nausea and diarrhoea. So little, however, did he heed these symptoms, that he went out as usual the next morning; and it was only in the evening that the occurrence of the frequent passages obliged him to seek medical aid. The discharges were serous, yet still tinged with fecal matter and bile. There was the most intense craving for cold drinks, but an utter inability to keep anything on the stomach; even water, which, strict commands to the contrary notwithstanding, he drank by the pint, came up instantly. All attempts at medication by the stomach had to be abandoned, and he was nourished by injections of beef-

tea and brandy, to which some laudanum was added. Under this treatment he began to improve, and the stomach was becoming settled, when a few teaspoonfuls of ice-cream, which he insisted upon swallowing, rekindled the gastric disorder in its full activity.

The *autopsy* was made forty-eight hours after death, with the kind assistance of Dr. Rhoads and Dr. Wm. Pepper, and with this result:

Abdomen.—On opening the abdomen, the viscera were seen in their normal position. There was no peritoneal injection, but the jejunum and ileum were throughout irregularly congested. Eighteen inches above the ileo-cæcal valve, the mucous membrane was in a state of dark purple congestion, with points of capillary ecchymosis; near the valve but slight congestion existed. Both Peyer's patches and the solitary glands were very prominent; the former showed on the prominent portions minute black dots. At the upper part of the small intestine in and near the duodenum, an abundant light green viscid matter formed a thick coat on the surface of the membrane, excepting where this was denuded. Below this section of the bowel was a large collection of rather dark matter, distending the gut; there was no abrasion, but an attempt to remove the colored mass took the epithelium away with it. The large intestine contained very little of the kind of contents mentioned; and as regards the coats, nothing but follicular prominence struck the eye. The greenish matter in the small intestine was found on microscopical examination to be an aggregation of stained epithelium; the microscope also showed that in the denuded, and smooth, anæmic looking portions, the villi were totally bare; only here and there were a few nuclei observed to be clinging to their surfaces. Chemically tested, the green matter in the small intestine, when acted upon with nitric acid, showed the most marked play of colors; the violet appearing almost instantly with great distinctness.

Sections of the kidneys examined under the microscope exhibited a very granular appearance of the cells, and much granular matter in the whole field. The tubules were crowded with epithelium; the membrane did not seem to be desquamated. There was everywhere a singular absence of capillary congestion. Muriatic acid did not clear up the granular matter; acetic acid did so to a very great extent.

These specimens are exhibited to the society, and the case placed on record for several reasons. In the first place it shows how kindred very bad cases of sporadic cholera are to the malignant epidemic disease; how difficult it may be in isolated instances to draw the dividing line. We have here the same intestinal lesion; the same suppression of urine. The difference consists chiefly in the character of the discharges, the absence of cramps, and in the history to which it is right to add that several bad cases of diarrhoea happened about the same time in the neighborhood, but no fatal ones; moreover neither in the summer preceding nor in the summer following, was cholera epidemic in the city. And death in the case reported must be attributed rather to the induced urinary disorder than to the intestinal lesion.

But a still stronger reason for recording this case is because it bears on a point now undergoing much discussion, whether mercurials act on the liver. Discharges changing under the use of calomel, becoming typical calomel stools, death taking place within about twenty-four hours after the remedy is suspended, colored matter almost identical in appearance with the stools voided found in the small intestine, and a distended gall-bladder, would appear to be points impossible of explanation in accordance with the now so strongly advocated views. For instance, this case would almost seem to me by itself to upset the doctrine that the color of the stools

after taking calome is not owing to the bile, but to the altered secretion of the glands of the large intestine. And as regards another view that calomel only causes the bile to be swept on before there is time for its absorption, it does seem strange that the kind of stools which this patient had, should not have happened until after the remedy had been taken for some little time; not have happened when the passages were more frequent than before its administration. Whether calomel acts by irritating the upper part of the bowel, and by the irritation being reflected to the liver and increased quantities of bile thus evacuated, or whether it acts by directly stimulating the viscus to increased secretion, is not elucidated by these remarks. But this question has always struck me as one which has been needlessly dragged into the discussion, for it is really substituting the inquiry *how* an article acts for the inquiry, whether it acts *at all*.—*Proceedings of the Pathological Society of Philadelphia.*

PROPYLAMIN REVIVED AS A CURE FOR RHEUMATISM.—Twenty years ago Propylamin was introduced as a remedy for Acute Rheumatism, and as such enjoyed some popularity. But its career was brief, and the remedy was soon forgotten. At that time the present writer gave it a trial, and found nothing to commend it but its unsufferable nastiness, which was so great that some patients preferred rheumatism to propylamin. Of late, it has been revived as almost a specific. At the sessions of the "Medical Society of the Hospitals," in Paris, (vide *Gaz. Hebdomadaire*, Jan. 17, 24, 31), a number of practitioners asserted its efficacy, and reported numerous cures of acute rheumatism in a few days. Others, however, made opposite reports, based on their experience. M. Champouillon doubted whether acute articular rheumatism could ever be cured in ten days. The question was left for further experimentation. In regard to the

preparation of the agent, M. Dessaigne had made from it a fixed, crystallized salt, of invariable composition, the chlor-hydrate of trimethylamin, the therapeutic use of which would be more commodious if its action should prove identical. Three specimens of this salt were exhibited, one made from herring pickle, one from *Chenopodium vulgare* (wormseed), and the third from human urine. The best mode of administering propylamin is in capsules, or dragees, each containing about a grain.—*Pacific Medical and Surgical Journal*.

This remedy has lately been extensively used in this vicinity, it being brought prominently to notice by the article of Dr. Gaston, of this city, and in this *Journal* of 1871.—Ed.

THERAPEUTIC VALUE OF EUCALYPTUS GLOBULUS.—In order that an intelligent use of this drug may be made by the profession, it is necessary that we learn its physiological action. On this subject, Dr. Gimbert, in *Archives Generales de Medicine*, February, 1873, gives many interesting facts, which we state, as translated for the *London Medical Record* for February 19, 1873. He says, that the oil of the above plant contains almost all its active properties. A moderate dose of this oil, ten to twenty drops, at first accelerates the pulse, produces pleasant general excitement, as is shown by an irresistible desire for moving about, a feeling of buoyancy, increased appetite, strength, and sexual appetite. It will not intoxicate in sufficient doses, as opium or alcohol, but unlike these drugs its effects are followed by a general calmness and soothing sleep. After the stimulating effect has passed, the arterial tension is diminished and the temperature falls. Even in moderate doses this fall is from one to two degrees. The pulse becomes less frequent, and may fall to fifty beats per second. The senses, including the muscular senses, are blunted. The functions of the brain are unaffected. The reflex functions of the cord are de-

pressed. When fatal, eucalyptus kills by destroying the excito-motor functions of the cord. An old man by mistake took eighty drops of the essential oil. It produced a feeling of internal heat and paralysis of the extremities. He was unaware of the existence of his extremities when he shut his eyes. When he tried to move his legs or arms they obeyed him imperfectly, the movements being feeble and disorderly. A cup of coffee removed these symptoms. The Dr. points out a close resemblance between this remedy and bromide of potassium, and thinks that when employed as a sedative in tetanus, scarlet fever, or other acute diseases, the thermometer should be used. As in some doses it stimulates the sympathetic, and promotes capillary circulation, he recommends it in congestions and paralysis of the capillaries. It will disperse many cerebral and pulmonary congestions, but it is not admissible in acute bronchitis, as it over-stimulates. In large doses the stimulating effects are slight, and it soon produces asthenia and paralysis.

This oil is absorbed by the stomach and lungs, and eliminated by the lungs, kidneys and skin. In its passage through the lungs it contracts the capillaries, promotes circulation, and hence deepens respiration, and removes congestion if present.

It makes the urine smell of violets, and doubles the amount of urea eliminated in a given time. Escaping by the skin, the essential oil renders the sweat odorous. To sum up his conclusion, the Dr. says: It is antiseptic by preventing decomposition of organic substances, and particularly of blood. It is a powerful general stimulant through its primary action on the nerve centres, and sympathetic, thereby quickening the capillary circulation. Through its influence on the nervous system it is anti-spasmodic. By diminishing the excito-motory activity of the chord, by lessening animal combustion, the frequency of the respiration and the circulation, it be-

comes a febrifuge and sedative. As an external application in neuralgia, he uses a liniment of one part of the essential oil to five parts of sweet almond oil. The inhalation of the tincture or fumes of leaves is said to relieve the spasms of asthma.—*Detroit Review of Medicine and Pharmacy.*

EFFUSIONS OF BLOOD CAUSED BY A NERVOUS INFLUENCE.

—There is a certain class of ecchymoses which have ever been a mystery to the practical physician. Tending towards an explanation of some of these cases we find some interesting observations of Dr. Brown-Sequard detailed in the February number of *Archives of Scientific and Pract. Med.*

1. He has shown that injury to the dorsal region of the spinal chord is followed by congestion, and often effusion of blood in the supra-renal capsules.

2. Irritation of the nerves of a limb may produce hemorrhages in the bowels or other abdominal organs.

3. Injury to the corpus restiformis is, in Guinea pigs, rapidly followed by ecchymoses under the skin of the external ear.

4. Lesion of the pons varolii or neighboring parts of the brain is followed by an immediate effusion of blood into the lungs or other organs, as heart, pericardium, pluræ, supra-renal capsules and kidneys, stomach, bowels, liver.

5. The nerve fibres by which these results are produced, are not transmitted by the par vagum, as experiment proved.

6. They are transmitted by the spinal chord from which they pass into the first thoracic ganglion of the sympathetic nerve, and thence to the various organs.

7. The tearing of blood vessels which gives rise to an effusion, in the experiments detailed, must be due to either. (a.) A contraction occurring at the same time in veins and arteries, that in one of these sets of vessels

taking place from a trunk towards its ramifications, pushing the blood into the capillaries till they burst and give rise to the effusion of blood. (b.) A similar contraction taking place simultaneously in both arteries and veins, so that both vessels push blood towards the capillaries, and so bursting them.

8. It is certain that the capillaries are the vessels which burst and allow the effusion of blood. Further, it is by an irritation of nerves of blood vessels that the irritation of the pons varolii produces ecchymoses and larger hæmorrhages in the lungs and elsewhere.—*Detroit Review of Medicine and Pharmacy*.

BOILS, THEIR CAUSE AND CURE.—Dr. J. D. McGaughey in *Medical Times* (March 8), gives some good reasons for thinking that the probable cause of boils is a temporary increase of the white blood corpuscles. For their cure he recommends the use of quinine in doses sufficient to affect the head, and continued till recovery. Arsenic he thinks the next best remedy. This view is further supported by the observations of Binz. He found that quinine kills the white blood corpuscles, and when given by the mouth the quantity of white blood corpuscle in the blood was diminished.—*Detroit Review of Medicine and Pharmacy*.

To American Publishers and Authors:

There are many American books, pamphlets, maps, etc., so interesting, important, special and unique, and therefore so deserving of wide recognition, that there would undoubtedly be a considerable demand for them in foreign countries, if public attention were there properly directed to them.

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Publishers or authors desirous of having their publications inserted in my Catalogue, and in the Index, will please apply to me for the requisite number of blank forms, which must be carefully filled up, and returned to me without delay.

E. STEIGER.

New York, February 5, 1873.

Editorial.

WE present in this number a valuable paper, statistical and otherwise, prepared by Dr. Toner of Washington City. The doctor seems particularly fitted for such work—to which is added the material found in that city, containing the data from which proper deductions are made.

WE still continue the JOURNAL as of yore, same size, etc. All who have received former numbers know why this is so. To those who have not so read, we refer them to such for information. If physicians do not, to any great number, want an enlargement, or if wanting it, are too careless to give information establishing such fact, then we say the JOURNAL shall continue to be what it has been up to the present—a journal of value according to its size, worth *all* that is paid for it, and conducted in as careful a manner as most Journals of the kind. To those who *pay* it will be sent—to those who do not pay, when we find that fact out, it will *not* be sent.

SOME complaint now and then reaches us of those who have failed to receive certain numbers of the JOURNAL. To all those we would say, “accidents will happen,” to you as well as others. Make known, in a friendly manner, your annoyances, and we will do our best to remedy

the evils complained of. Because such accidents do occur, do not brand us as either careless or wilfully negligent. Such accusations you have no right to make upon such slim foundation.

• SOME do not like *this* article, and others *that*. A word is out of place, and the strict rules of grammar slightly ignored; or perhaps a typographical error—from which who can be free?—is construed into a want of proper care upon the part of the composer or editor. To all such we say, try and do better; act not the dog in the manger. Write, and give others a chance to criticise you, or else cease the silly chatter, and concentrate your attention more upon the substance of what is written, and less upon the manner in which it is expressed. Are you polished? Men equally as good are not. Can you parse every sentence correctly? Many who would laugh at your efforts in science or your attempts in literature, have never been pedagogues or sought to “teach the young idea how to shoot,” and therefore may vary from your mathematical and parrot-like precision in construction, relying somewhat upon the study of the best authors, cultivating the taste, and yielding to the undoubted variation in grammatical construction that exists, sanctioned by *custom*, and upheld often by *common sense*.

Language is not confined by iron bands, however strict the rules of grammar may be, and while we know errors occur, especially through proof-readers and in “setting up,” still we like not the mind that feeds upon such editorial husks, and casts the substance to one side. Such are hypercritical, and to those our advice is, “put yourself in his place.” *Adieu*.

IN this number of the JOURNAL we send a few *bills* for subscriptions due. If any mistakes are made, those receiving bills who owe us nothing will make allowance for human imperfection, and overlook it, as *we* do when no money comes after repeated *calls*.

OBSCURE FORMS OF HEMIPLEGIA.—Dr. C. E. Brown-Sequard in the *Archives of Scientific and Prac. Med.* for February, gives in detail, with comments, the histories and *post-mortem* examination of four cases of hemiplegia:

Case First.—Wound of the medulla oblongata in its right half, attended by paralysis of the right side of the face, and of the right limbs.

Case Second.—Right half of the medulla oblongata almost entirely destroyed by a tumor, attended by paralysis of the right side of the face, and of the right limbs.

Case Third.—Lesion of the right side of the medulla oblongata attended by paralysis of the left extremities and right side of the face.

1. After showing that the facts recorded in these cases can not be explained by the accepted views of the physiology of the cerebral centres, the Dr. remarks that we must admit that either half of the brain alone can and will regulate the movements of the limbs on the two sides.

2. When disease exist in any part of the brain proper, the cerebrum, the pons varolii or medulla oblongata, the lesion can produce paralysis either in the corresponding side or the opposite side.

3. If there be paralysis it is produced not by the destruction of either the organ of the will, or that of conductors between it and the muscles, but by an arresting influence exerted on distant parts by the irritation of the diseased fibres or cells.

It is surely true, that if these statements are correct, then the explanation of the preceding cases is perfectly clear. The proof of his views the Dr. promises to give us shortly.—*Detroit Review of Medicine and Pharmacy.*

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(See Figure 15)

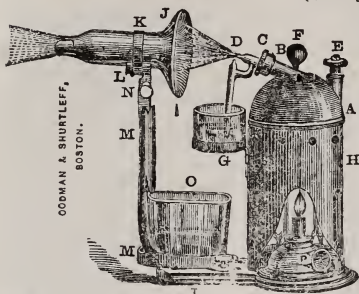


Fig. 15. Complete Steam Atomizer
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[SEE NEXT PAGE.]

INDIANA JOURNAL OF MEDICINE

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No. 2.

Original Communications.

A STUDY OF THE PHYSIOLOGY AND PATHOLOGY OF THE ORGANIC NERVOUS SYSTEM.

BY. R. E. HAUGHTON, M. D., RICHMOND, IND.

First.—The nervous system is divided for study into two general divisions. 1st. The cerebro spinal system, including thirty-one pair of spinal nerves. 2d. The sympathetic or ganglionic system. These two grand divisions of the nervous system, are related internally, and extensively, yet each exerts its own power within its own sphere.

The cerebral nervous system, is formed differently from the sympathetic. The branches of the first converge from the periphery of the body towards the brain and spinal cord, and are inserted into it by roots, and has but one common centre, which is the brain. The last or sympathetic nervous system, is not found in any one centre, but is made up of numerous centres, and exercises control over all the vital and organic functions of the body.

Again, the sympathetic system connects the various

organs within its realm in three different modes. 1st. It forms a network about the vessels, which include the arteries in their minutest ramifications, and send branches or filaments along with the vessels into the organs. *These networks* of nerves are called plexuses, twelve of which are described as belonging to various parts. 2d. These plexuses are connected to the brain and medulla spinale by branches which Reil calls conductors. These conductors form a means of communication between the two systems, and any influence of diseased action is communicated by a reflex sensation to the brain. In or upon these conductors are enlargements called ganglia, which are nerve centres, in the area in which they are found. In a healthy condition the ganglia exerts no perceptible or manifold influence upon the cerebral system from which it is separated by the series of ganglia in the sympathetic nerve. But in disease it is different, as when the vital force or energy is increased in the communicating nerves radiating from the plexus, the condition of ganglia is changed, they transmit impressions of changes which the extremities of nerves receive in the viscera, which is fully demonstrated in the forms of continued fevers. This system presiding over nutrition of organs and tissues, we see the influence thus exerted in the viscera of the abdomen in both gland and tissue disintegrations. In the fœtus, the sympathetic nerve is the controlling influence, as it is formed prior to nutritive and secretory organs, it sustains the energy of the heart, and, in certain cases, goes beyond the cerebral sphere, determining the automatic motions which are made in intra-uterine life. Acephalous cases, deficient in cerebro spinal development, and therefore wanting in that portion of the nervous system from which emanates the principle of muscular contractions, do however perform muscular movements which can in no other way be produced or excited than by the vital influence of the sympathetic

nerve which has communication with spinal nerves by anastomosis.

Again. During the extra uterine life of man, this nerve forms a peculiar kind of relation to the brain, and between the brain and the viscera of the chest and abdomen. It here, also, as in the embryo and fœtus, governs the system of capillaries and directs the functions of assimilation and nutrition, through a power which has been called the vital force. There is evidence that the pneumogastric nerve and sympathetic may each perform the functions of the other, as there is reason to believe that the inter-communication of branches from each, enables them to control the functions of digestion and assimilation, as upon perfect nutrition must depend these, as well as those of respiration and circulation. It is proper to regard the parvagus as of the same class as the sympathetic, which so combines the three great functions of respiration, circulation and nutrition, into one, so that they have been called the tripod of life—either one of which ceasing, life is extinct. So we see manifest beauty and harmony in the arrangement, which places them under influences beyond the ordinary exercise of will for their continuance. Anatomically the sympathetic and pneumogastric presides over these three great functions of life, besides sending branches to associated organs, giving them energy and influence, but also is distributed to the arteries which carry nutrient blood for the purpose of equal and regular distribution. Physiologists have long recognized and acknowledged the influence of the nervous system over capillary and nutrient vessels, and pathologists and therapists are busy with the problems by which the vessels in diseased organs may be so controlled as to increase or diminish the blood supply as the indications require. The question is, have we such agencies? Unquestionably we have. But leaving therapeutic considerations, at present we pass to other points.

The function of the brain is thought, or intellection, and perception of sensation, thus by two important acts presiding over all the life and power of the organism. But the manner in which the brain does its work, the completeness which is seen in its control of all the functions of the organism and keeping them in the harmony, which gives the most perfect health is dependent upon the most complete sympathy and harmony of the most remote as well as contiguous parts. We have assumed, and believe that the nervous system is the regulator of all force manifested in the human body, and the force is stored up and expended as may be required, to be expended upon the functions of the organism whether in health, or promoting and restoring it when lost. The nervous force is correlated with the force which is transmuted in the digestion and assimilation of food. The food is converted into living cells and elements, and carried to different parts of the body by the vessels of circulation. But the nervous system brings all this complication of machinery into beautiful harmony, by means of which we communicate with the outside world, and which, in the outside world, is called telegraphic communication, but which is in pathology and physiology, known as reflex nervous action. Hunter called it contiguous sympathy. Some now use the term sympathetic influence, yet neither of which express the great fact of nervous agency, as it is. The anatomical discovery of Sir Charles Bell, of afferent and efferent nerves, or sensory and motor, was a large advance upon the knowledge of the nervous system as it then existed, and produced marked changes in medical opinion. But the discovery of what we now understand to be the reflex influence and power of the nervous system, made by Sir Marshall Hall, (the limiting this power to the spinal ganglia), was a still greater advance, though the limitation thus made, for a time retarded progress in the study of nerve physiology and pathology. The name

given by Hall to this power was, excito motor, and in 1857, he announced in the following language this fact in addition to the former announcement, which I believe was in February, 1837, viz: "I believe I may now announce a system, or sub-system of nerves—EXCITO SECRETORY—not less extensive." This discovery was contested, and priority claimed by Prof. Campbell, and admitted by Marshall Hall. Yet while admitting the claim he says: "The elaborate experimental demonstration of reflex-excito secretory action, is the result of the experimental labors of M. C. Bernard. The idea and designation of an excito secretory action, belongs to Prof. Campbell." Hence the conclusion is, it not having been denied, that to Bernard the proof and demonstration belongs. It matters not so much as to the other American claimants about the question of priority, Prof. Payne and Prof. Allen, when they only had the theory, while the proof belongs to, and was made by others. But it is not with the question of priority of discovery that we are so much interested, as with the fact, and in studying the physiology and pathology of the nervous system, we want all the facts which have had a demonstration, in building for ourselves a substantial basis to guide us in diagnosis and therapeutical application.

The anatomical facts as to the relations of the sympathetic and cerebro spinal systems, are these. 1st. "The branches by which the sympathetic system communicates with the cerebro spinal, and which were formerly considered as the roots of the sympathetic, contain fibres of both kinds," viz: "Cerebro spinal fibres passing into the sympathetic, and sympathetic fibres passing into the cerebro spinal." These latter, viz: sympathetic are chiefly, if not entirely transmitted into the anterior branches of the spinal nerves, the posterior branches being with sympathetic fibres transmitted from the ganglia on their own posterior roots. By these inter communications the two systems are intimately blended with

the radiations or distributions of the branches, especially upon the heart and arterial trunks, throughout their entire course, from which fact we deduce the inference that an important influence is exercised over the functions. This question is one for investigation and which we hope somewhat to examine.

In a paper before read here we gave some proofs from actual dissections, going to prove that the very fatal and uncontrollable disease, glycosuria, is a disease of the nervous system, and the structure of the spinal cord was found to undergo disintegration and destruction at points immediately outside and contiguous to arterial capillaries, and as a consequence of the destruction of nervous tissue, the liver and kidneys were found overloaded with material, effete, and dead, and not able to perform their wanted functions. Whatever the nature of the nervous force, we believe it has much to do with the various functions of organic life, by which we mean the nervous functions performed as "*nutrition, secretion, excretion,*" &c. Preceding, however, the influence the nervous system exerts upon the various functions, we must consider the influence of this force upon the various organs in the distribution and circulation of the blood, viz: in the dilatation and contraction of arteries and capillaries. We have alluded to the fact which we hope to be able more fully to develop at another time, that the nervous system contains a modicum of force stored up in its neurine, which is of two kinds, viz: vesicular and tubular, and this force is convertible and co-related with other forces, as for instance, through nutrition the organic elements of the outer physical world, are converted into nervous tissue, which becomes the neurine. The vesicular neurine generates force, and the tubular conducts it, thus giving the very means by which thought, sensation, volition, all, are developed and radiated upon the material of the physical world. Cells are separate, or independent centres from which new cells and new

structures are evolved, and cells of nerve structure deposit new material from the blood, and construct and reconstruct the tissues which are being, by organic activity, constantly disintegrated. Thus, is each nerve and nerve centre, as ganglia spinal centre, or brain centre, developed from a common centre, it having been anatomically demonstrated that the solar plexus, the centre of the organic nervous system, is produced before the existence of any vesicular centre; that branches of this organic system surround, penetrate and ramify upon the blood vessels to their utmost ramifications, and increase in size and number in proportion to the importance of the function performed by such vessels in the organism. But there is one branch of this very interesting question which may require some thought, viz: How far can the functions of the body be carried on apparently in a normal manner, independent of the cerebro-spinal, or spinal systems? The evidence is given us in cases of monstrosities, or those cases in which development was arrested and the brain was deficient, also in cases of injuries to the spinal cord, and destruction of certain large nerve trunks.

In cases of acephalous births, given by Hall and Laurence, the excito-motor function was well performed, and the nutrition and secretion, with excretion, all were performed. In the case of Dr. Hall, without brain or spinal cord, yet well proportioned, we have proof of the independence of the organic functions performed in the absence of a cerebral or spinal system. That there is in a normal state a mutual inter-dependence and association, is not denied, but when many of the most important functions of the body are carried on independent of a cerebro spinal system, we are driven to the conclusion that the organic nervous system carried on these functions as regularly as if the other systems participated. Physiologically, the organic nervous system exercises control through the circulation and nutrition, over the

architectural beauty and perfection of the organism, as well in normal as abnormal life. Secretion and nutrition are as elaborately performed, even circulation in plants, and in the lower order of animals, as in the mammalia, and in man. Pathology teaches us that organic processes proceed in parts of the body which have been paralysed by injury or disease of the lower portion of the spinal cord, as before the injury, also wounds and fracture of bones, where deprived of brain or spinal influence, have proceeded to a cure as readily as under the most favorable circumstances. Again, in bed sores from lying after paralysis of the lower segment of the body, the most perfect and rapid cures have been made in a few days time by galvanic stimulation, the granulations and cicatrization beginning in a few days after the first application, and continuing to a cure. Thus we affirm and prove the agency of the sympathetic nervous system in carrying on the functions of the body, as well as aiding in the restoration of diseased states and conditions. There is no doubt that these conditions of repair were carried on by the organic nervous system, from the fact that the branches from this part of the nervous system were properly distributed, and maintained the power of the life force, or nerve force, so as to secure the repair of structure once destroyed. Also, while this continues the blood vessels were intact carrying on the circulation, and as we have shown that the arteries and capillaries are supplied with trunks, or filaments from the organic nervous system, which is now believed to regulate (I might say known to regulate) the dilatation and contraction of these vessels, thus increasing or diminishing the amount of blood thus circulated to or from a given structure. Under this influence there is a marked variation in the velocity of the currents of the blood at different points, and we merely affirm now, without going over all the argument upon this question, that all facts which bear upon the ques-

tion of the relation and connection between nervous agency and the forces maintaining the capillary circulation, have also an equal relation to nutrition and secretion in general, and as the nervous system undoubtedly influences these in quantity and quality, we thus prove the control which is shown in the changing capacity and diameter of the blood vessels. The veins also show the same influence in degree, but not to the same extent as is observed by the application of stimuli, or by their irritation of fibres of the sympathetic.

Having thus laid down the basis of demonstration for the proper interpretation and diagnosis of certain forms of disease, as well as treatment, we proceed to some questions in the field of general pathology. First, then, in reference to the influence which vaso-motor nerves have over the diameter of the arterial tubes, it is impossible to doubt that through this influence the nutrition of the system with all its various phenomena, is produced, carried on, modified or changed. In this way we make one step in advance in the study of "inflammation," which is known to be a perverted or arrested nutrition. So again in neuralgic disturbances, we have evidence of deficient blood supply in the wasting or atrophy of the muscles, the hyperæsthesia, pain, with diminution of surface heat, etc. I have treated two or three cases, two of severe "sciatica," and one of the nerves constituting the brachial plexus, which illustrates the influence of reflex nervous pain in producing "trophic disturbances." In these cases of long suffering, hypodermic medication induced the most speedy relief. Spinal irritation, is one of those reflex disturbances in which the pathology is not very clear, but a large number of cases have proved to me that it is a reflex irritation, and the fact that a large per cent. of the cases are females, and upon due examination, and true interpretation, we find that uterine inflammation, or endo-cervicitis, is the *cause* of the constant reflex irritation which

produces general anæmia, hence we infer that the special disturbance of the spinal cord is anæmia.

Once Prof. Dunglison said to his class, when lecturing upon the physiology of the spinal chord, in reference to spinal irritation, "Gentlemen, I do not know what the pathology of spinal irritation is." That the general irritability found to exist in these cases, is dependent upon an anæmic state of the spinal chord, is entirely consistent with our knowledge of the vaso-motor function of the sympathetic. The experiments of Bernard,* Brown Sequard,† and others, together with the researches of Sir Marshall Hall,‡ Prof. Campbell,|| Remark, Erb Leube, and others, have enabled us to comprehend something of the relations between the sympathetic and cerebro-spinal systems, and also so to generalize our formulas for treatment, that success in their application is now becoming the rule rather than the exception.

Neimeyer says: "I consider it perfectly unjustifiable, in most of the writers on electro-therapeutics, to make a distinction between the effect of the constant current in neuralgia, paralysis, etc., and its effect in disturbances of nutrition. In most cases of neuralgia, or other nervous diseases, just as in affections of the joints, muscles, etc., where galvanism has proved useful, there is no molecular or any alteration in the electrical state of the nerves; but, as Remark distinctly asserts, there are disturbances of nutrition, anomalies of circulation and structure, exudations, etc.

Neimeyer admits that contraction of the vessels, supplied by nerves from the sympathetic system, does occur, and can be produced by the action of the induced or continuous current, thus remedying a disturbance of innervation existing in parts supplied by such contracted

*Phys. Exp. applied to medicine. Prof. C. Barnard.

†Ex. Researches. applied to Phys. and Path. B. Sequard, 1853.

‡Sir Marshall Hall, London Lancet, March, 1857.

||Essay on Dentition in Disease. Campbell, Vol. VI., Mass.

vessels. He says: "If application of the continuous current to the sympathetic causes a cure, we know the disease was a disturbance of nutrition of the sympathetic, which has been removed by the catalytic action of the galvanic current." He says further: "That the marked difference between the constant and induced current, in regard to their chemical action on water, solutions of salt, albumen, etc., has long been known, and I am fully convinced that the introduction of the former into practice is one of the most valuable advances of modern times, and that in the constant current we have a means more powerful than any other of modifying the nutritive conditions of parts deeply situated." The true relations of the nervous system to disease must be based not only upon the relations of the sympathetic system to the organs, but also to the systems of organs to circulation, respiration, secretion, excretion, and, most of all, to nutrition, to motion, to sensation; also its relations to the cerebro spinal system, the relation of the intellectual faculties to the nervous system, and with all the functions which may be called organic functions. In cases of abnormal sensation or motion, of secretion, excretion, of respiration and circulation, the cause of the abnormality may be entirely eccentric to the nervous system, and reflexing its influence upon the central organs; hence spasmodic action of muscles is abnormal sensation and motion, or it may be found in chemical or physical changes in the blood, induced by the catalytic action of morbid agents; also in abnormal intellectual action, it may arise from chemical or physical changes in the blood producing changes of function in the brain—that is, abnormal mentality—insanity in its protean forms, and which brings us to say that we are prone to believe that abnormal action of mentality, except when there are organic changes, most frequently result from physical disease in other and remote parts of the body. And this is coming to

be the recognized view of psychologists, though not all of them.

We find Prof. Hammond says, in his work on diseases of the nervous system, "that the insanity of women *generally* has a reflex origin." While his reviewer said, "We might admit its truth if the word *sometimes* were substituted for *generally* in this statement." But we must be allowed to say that our own observation and experience are with Dr. Hammond in such a statement. If we study the pathology of fevers we shall, if we are careful observers of the history and symptoms, generally come to the conclusion that the first lesion is one of enervation. If all the functions are under the control of the organic nervous system, we can trace lesions of these functions in any one or all of the types of fever incident to the country. Whatever the primary cause may be, the first evidence of its impression is upon nerve centers, which is manifested in lassitude, aching and loss of muscular power, loss of appetite, nausea, with evidences of arrested or perverted secretion and excretion, all of which we have shown are under the control of the organic nervous system. If an organ be healthy, other things being equal, its function must be healthy. If an organ exhibits vitiated and deranged secretion, we regard it as true that the function is deranged; consequently the organ presiding over it, giving it its power for work, cannot be in a physiological condition. I know that it may be said, that any secretion may be changed or vitiated by a change in the condition of the blood, without disease of the secreting organ. The urine may present different aspects, and contain diverse and changing chemical elements at different times, or the bile may change its composition, as the blood is altered in its normal quality or quantity, either of which conditions might obtain in diseased action. Admitting all this to be true, it does not alter the position assumed, as the blood must depend for nor-

mal conditions wholly upon the organs which form it, and also of such organs as eliminate its effete, dead and waste material. But we go still farther, and say that the blood making organs are supplied with vessels distributing blood, and these vessels are under control of the organic nervous system; hence blood supply and distribution are also important elements in the process of blood manufacture. The endangium of blood vessels must have blood supply, while they have nervous distribution which shows a mutual relation to work to be accomplished. We should find, then, a definition of most, if not all, fevers to be, a lesion of the nerve centers subsequently complicated by some inflammation, which secondary disorder may become the prominent disease, or only modify and change the whole relations of the disease. As we distinctly have recognized in the nervous system two grand divisions, first, the cerebro spinal system, all the normal actions of which are subject to cessations and interruptions, and secondly, the sympathetic system, all the normal actions of which are of a continuous and uninterrupted character, so in febrile diseases do we observe the types of fever conforming to a general law, unchangably so, typifying the normal actions of these two divisions of the nervous system. The malarial types of fever are paroxysmal, while the continued types correspond to the continued action of the organic nervous system. The cerebro spinal system presides over sensation and motion, and exerting a less marked influence over secretion and nutrition (the excito secretory), while the organic nervous system, in its complete influence, presides over nutrition and secretion.

Again: In paroxysmal fevers we find intense pain, modified sensation allying them to convulsive and neuralgic forms of disease; indeed many times coming on with such symptoms, while the continued fevers exhibit altered or modified nutrition and secretion, with a low,

exhausted and depraved condition of the nerve forces as the most prominent features. We have, therefore, long ago, from observations and experience, divided, as a most ready means of diagnosis, the types of fever into two classes.

1st. Cerebro-spinal fevers—all paroxysmal.

2d. Ganglionic fevers—all continued.

3d. Mixed types—which combine both forms.

In the first class, the nutrition and secretion are secondarily disordered or disturbed. In the second class, the nutrition and secretions are primarily and profoundly disturbed. Starting with such a basis of diagnosis, we see how many other forms of disease will come to arrange themselves under such a classification, such as neuralgia, pneumonia, dysentery, and other forms of inflammation which prevail in malarious districts, and are influenced by the common epidemic or endemic influence. Yet we believe we assert a great and important truth when we say that the cerebro spinal division of the nervous system impresses the strictly periodical or paroxysmal character upon all forms of disease which so manifest it. We thus find this periodical type of disease manifested in many forms of disease, widely differing from each other, and the Western practitioner has constantly said to his patient, "That is the consequence of malarial poison;" and yet such a thing as malaria has no existence, as proved or demonstrated, save in the imagination, and brought out in theory. The true idea is, that the nervous system, through causes which are occult, is deranged, disturbed in its harmonious action, and it is the province of the cerebro-spinal division, "having its power of action in a limited portion of the entire nervous system, its functions being submitted to the will, they are temporary, and can only be repeated after complete intermissions of longer or shorter duration."—*Le Gallois*. Thus we can account for intermittent fever, remittent fever, periodical neuralgia infantile

convulsions, in its phenomena, and all other strictly periodical types of disease. Here, too, we have an adequate interpretation of the influence and power of quinine. The nervous force is impaired and depressed; hence the intermissions, its manifestations of chill, fever and sweating, and all other such irregular phenomena. The chill is a consequence of depressed power; the fever is a consequence of this depressed power, exerted upon the vascular system; in other words, reaction from depression. The sweating stage is the return of the entire systemic condition to as nearly its natural state as consistent with all the surroundings, being also nature's effort to eliminate any effete or dead material which had been accumulated during the cold and hot stages, as the functions of secretion and excretion are embarrassed, or arrested in a degree. Now, quinine restores the nervous tone, and when this is done, the irregular action is prevented, chill is arrested, and cure is the result. We shall not stop to deny the agency of certain agents in the atmosphere which affect the nervous system, and thus depress, disturb the healthy relations; but what we do affirm is, that the periodicity resides in the cerebro spinal nervous system. We would be glad to epitomize in a brief summary the important facts, over which we have travelled, and which we believe must have great importance in directing us to the truth as we study disease.

SUMMARY COMPILED, IN PART, FROM LOBSTEIN.

“Conclusions based upon the anatomical structure lead us to the following inferences as to the functions of the ganglionic system.”

1st. “It is not independent of the cerebro-spinal system, but derives power and activity from its connection with that system,” and relation thereto.

2d. “It is connected throughout its whole extent by

the numerous nervous filaments passing from one ganglia to another, and uniting the different plexuses."

3d. "All the organs contained in the great cavities, together with the genital organs, which receive nervous filaments from this system, are placed in communion and continuity of actions and impressions, which are transmitted from one to the other, and thus it is the principal instrument of the sympathies between these organs."

4th. "Supplying all the functions with nerves, and communicating with the cerebro-spinal nervous system by nerves passing to and from the ganglia, it is thus the medium of communication between all these organs and the nervous system of relation, and is the chief agent in maintaining the exercise of their functions in a healthy or normal state."

5th. "From the great multitude of nerves which it distributes to the arteries, the closeness with which these vessels are invested with nervous filaments, and which are lost in their coats, it must exercise an active control over their circulation," in contraction and dilation, and thus controls the amount of blood in a given area; and in this way, controls these secretions, excretions and also nutrition.

6th. "The muscles which receive nervous filaments from this system have this peculiarity, that they act without volition, or even consciousness, as in the automatic movements of acephalous children, thus proving nervous stimulation for this purpose comes from the ganglionic system." (Page 37).

7th. "The ganglionic system furnishes the principal nervous supply to the surfaces, in which are seated the instinctive wants of the organism, and we have these facts: *First*, the ganglionic system is the nervous apparatus of the instincts and internal senses; *second*, it communicates to the nervous system of animal life, or relation, the wants of the economy; and *third*, is capable of

compelling that system to command the acts necessary to supply these wants." (Page 37.)

8th. Pathological phenomena will furnish ample illustration and elucidation of the facts when properly interpreted."

9th. Reflex irritations, as alluded to in the text, are variously proved. *First*, irritations or inflammations of the uterine tissues—as endo-cervicitis—will produce spinal irritation, neuralgia, dyspepsia, cephalalgia, melancholia, mania and insanity; *second*, irritations in the stomach and bowels will produce irritations and inflammations in the brain and spinal cord, with hydrocephalus, and consequent atrophy." The connection between the cerebro-spinal system and the mucous tissue of the intestinal canal, by which the influence is transmitted to the other, is effected through the nerves of the ganglionic system, and the inosculation of the solar flexus with the pneumogastric nerve." (Page 40.) The stomach is largely supplied by the par vagum.

10th. "The two important centers, viz: the organic and cerebro-spinal system, are immediately and directly connected together, and by this intimate relation and connexion we have a correlation of force, vital or nervous, and the relation or communication is established by the eighth pair, or pneumogastric. This arises from the medulla oblongata, and sends branches to the ganglia of the neck and thorax, but is principally expended in anastomoses, with the solar plexus and semilunar ganglia, so that it is equally well described as arising in these ganglia and terminating in the medulla oblongata; or, arising here and terminating in the ganglia." (Page 594-5.)

11th. "This communication, effected by the eighth pair, or par vagum, between the two centers, the medulla oblongata and semilunar ganglion and solar flexus, which is the abdominal brain, establishes the intimate union and relation, making, or uniting, the two great systems,

the cerebro-spinal, and sympathetic or organic, into unity or oneness, being after the idea of the Great Architect in moulding man in his physical, as well as spiritual, in harmony, "after his own image"—three in one, and one in three. By this triune relation, impressions are mutually reflected from one system into the other, producing a harmony of relation which only had an existence in the Divine Mind.

12th. Lastly, "the paroxysms of periodical fevers, together with the manifestations of convulsive seizures, neuralgia and many other types of disease, are the result of a regular rhythmic action, the consequence of law, radiated in the cerebro-spinal system, according to which they all must perform their evolutions and functions periodically."

CONCLUSION.

We reach the induction from the foregoing that there is a relation and co-relation of physical, vital or nerve forces with all the forces of the universe, and that, when the relations are proper, one kind of force is transmitted into another. "And the study of the connexions, relations and co-relations of the forces in man and in the universe is the complement of all physiological research, and the fulfillment of all pathological investigations." "The more profoundly they are examined, and the more clearly they are understood, with the greater facility will the production of morbid phenomena be comprehended, the mysteries which involves the pathological state be penetrated, and the perplexities proceeding from the complications and diversities of disease be unraveled. Let them never be forgotten by the practitioner when he stands by the bedside of the sick, between the living and the dead. This knowledge is the rock upon which he must build if he would erect a system of treatment at once rational, safe and efficient."*

*By Sam'l Jackson, *Work on Pathology*, page 619.

Proceedings of Societies.

STATE MEDICAL SOCIETY.

ANNUAL SESSION.

The Indiana State Medical Society met Tuesday, May 20, 1873, at 10 o'clock, A. M., in the lecture room of the Indiana Medical College. After a cordial interchange of greetings and the renewal of friendships among the large number of the profession present, they seated themselves, entirely filling the large room, and were ready for medical discussions and the business that brought them together.

The meeting was called to order by Dr. Joel Pennington, of Milton, President, who briefly acknowledged the honor conferred :

"The honorable position in which your generosity has placed me calls for a response from me, in which I respectfully acknowledge the favor and ask your indulgence and assistance in conducting the business that may claim our attention at this meeting."

Upon motion of Dr. Woodburn, the roll call was dispensed with.

At the close of the afternoon session, the following gentlemen had reported to the treasurer :

O. Evarts, S. C. Boynton, J. A. Cominger, L. D. Waterman, G. W. Mears, A. W. Davis, R. N. Todd, J. H. Woodburn, G. V. Woolen, W. J. Elstun, Thad. M. Stevens, Indianapolis; I. Cassalberry, Evansville; J. H. Helm, Peru; Joseph H. Eastman, J. T. Barker, Brownsville; J. M. Runyan, Stockdale; J. M. Bell, S. S. Boyd, Dublin; J. W. Hervey, Oaklandon; D. W. Butler, Dunreith; G. N. Duzan, Zionsville; H. C. Vincent, Guilford; E. N. Tull, Ogden; L. Borey, Warren; F. J. Bogard, Charlottesville; William Lomax, J. S. Shively, Marion; John F. Sims, Elizaville; N. P. Howard, S. M. Martin,

E. J. Judkins, Greenfield; Wilson Hobbs, Carthage; W. H. Hornaday, Russiaville; J. S. Gregg, Fort Wayne; S. G. Irvine, Crawfordsville; S. E. Mumford, Princeton; W. F. Harvey, Plainfield; C. H. Wright, North Madison; W. H. Wishard, Southport; G. W. H. Kemper, Muncie; J. I. Rooker, Castleton; J. W. Green, Beachgrove; E. S. Elder, Morristown; J. Cochran, Spiceland.

The president appointed Drs. Kersey, of Richmond, Hobbs, of Carthage, and Helm, of Peru, committee on credentials, and on motion of Dr. Woodburn, they were empowered to act as committee on membership at large.

The president appointed as finance committee, Wm. Lomax, of Marion, J. R. Wiest, of Richmond, and I. Casselberry, of Evansville.

The Committee on Finance, after consultation, reported that, in their judgment, the annual assessment should be \$3, which elicited considerable discussion, but was finally adopted by the society.

The society then listened to an essay upon fibrous tumors of the rectum, read by Dr. T. Parvin, of Indianapolis. The essay was referred to the committee on publication.

The roll of essayists was called.

Dr. Haughton—On "The Correlation of Physical and Vital Forces."

Dr. Samuel Irwin—On "Cerebro-Spinal Meningitis, as it prevailed in Montgomery county, Indiana, during the spring of 1872."

Dr. T. M. Stevens—On "The Toxicological effect on Analysis for the various alkaloids."

Dr. G. N. Duzan—On "Cholera Infantum."

Dr. C. E. Wright—On "Diseases of the eye and ear."

Dr. J. W. Hervey—On "Utility of Forces."

Volunteer essayists and their subjects were then called for.

Dr. N. Field, of Jeffersonville, "Expectant Treatment of Disease."

Dr. Butler, two papers. 1st. "Spontaneous Gangrene and Thrombosis of arteries of lower extremities." 2d. "Malformation of Intestines and Imperforate Anus."

Dr. J. J. Rooker, "A few thoughts on how to obtain practice."

Dr. B. S. Woodworth, "Tetanus."

This comprised the list of volunteer essayists.

AFTERNOON SESSION.

The Committee on Credentials reported favorably as to the following delegates :

J. A. Corwan, Auburn, N. E. Medical Society.

H. C. Davidson, Hartford, Blackford County Medical Society.

K. V. R. Lansing, Hartford City, Blackford County Medical Society.

George D. Bailey, Spiceland, Mott Medical Society.

G. C. Eubank, Philadelphia, Mott Medical Society.

T. J. Bowls, Knightstown, Mott Medical Society.

H. M. Crouse, Knightstown, Mott Medical Society.

M. M. Hess, Cleveland, Mott Medical Society.

John S. Trowl, Warren, Grant County Medical Society.

L. Williams, Marion, Grant County Medical Society.

E. P. Bond, Lawrenceburg, Dearborn County Medical Society.

S. B. Robbins, Lawrenceburg, Dearborn County Medical Society.

A. G. Porter, Lebanon, Fountain and Warren County Medical Society.

C. D. Watson, Covington, Fountain and Warren County Medical Society.

W. H. Thompson, Winamac, Brainard Medical Society.

William Kelsey, Monterey, Brainard Medical Society.

Joseph L. Hagerty, Crooked Creek, Steuben County Medical Society.

A. E. Graham, Richland, Rush Medical Society.

William M. Ewing, Raleigh, Rush Medical Society.

John J. Inlow, Mannilla, Rush Medical Society

S. P. Collings, Indianapolis, Indianapolis Academy of Medicine.

R. Murphy, Roan, Wabash County Medical Society.

M. M. Hale, Lagro, Wabash County Medical Society.

The following gentlemen were recommended for membership by the Committee on Credentials: R. Y. Martin, Rensselaer; Seth Mills, Valley Mills; David Wall, Clearmont.

The Committee on Publication made the following report:

"We have issued 250 copies of "Transactions" of last year at a cost of \$325, and have sent a copy to each member who has paid his dues, also a copy to each of the leading Medical Journals of the country."

The treasurer, J. H. Woodburn, reported an (itemized) expenditure of \$432.45, and a cash balance of \$135.12.

The report was referred to the Committee on Finance.

The Secretary, Dr. G. V. Woollen, reported \$563, collected from members as dues, and turned it over to the treasurer, as per report.

Dr. Haughton, of Richmond, as chairman of a special committee "to petition the Legislature of Indiana for the passage of an anatomical law, etc.," reported want of success, and "we would still recommend the State Medical Society to urge upon the Legislature the passage of a law as we have heretofore contemplated, protecting the physician in the dissection of bodies."

The committee, Drs. Haughton, Hobbs and Waterman, were continued.

The President's address was made a special order for Thursday, at 10 o'clock, A. M.

Dr. Haughton read an essay "On Thrombosis of the Arteries of the Extremes, with an illustrative case."

Dr. D. W. Butler read an essay "On a case of Spontaneous Gangrene, with Thrombosis of the Arteries of the lower extremities."

The papers were referred to the Committee on Publi-

cation, and were freely discussed by the Society. Drs. Waterman, Harvey, Hobbs, Moffet, Robbins, Duzan, Lomax and Harvey, took part, giving the mode of treatment, and results in their practice.

The Society then adjourned until 9 o'clock, Wednesday morning.

SECOND DAY.

WEDNESDAY, MAY 21, 1873.

The Society reassembled in the lecture room of the Indiana Medical College, at 9 o'clock, A. M., with Dr. Joel Pennington, President, in the chair.

The order of business was announced. After which Dr. J. W. Hervey, of Oaklandon, read a paper "On the Utility of Forces."

The essay was discussed, and referred to the Committee on Publication.

The Committee on Nominations reported the following gentlemen as officers for the ensuing year:

President—I. Casselberry, of Evansville.

Vice President—W. Hobbs, of Carthage.

Secretary—G. V. Woollen, of Indianapolis.

Assistant Secretary—W. J. Elstun, of Indianapolis.

Treasurer—J. H. Woodburn, of Indianapolis.

Librarian—A. W. Davis, of Indianapolis.

The officers were considered elected upon the adoption of the report, which carried unanimously.

President Pennington then read an able address "On the most prominent diseases, and their treatment forty years ago," which was referred to the Committee on Publication.

Under suspension of the rules, the report of the Committee on Statistics was received, and read by Dr. Sutton, chairman of the committee. The report was commented upon favorably.

Dr. Parvin moved its reference to the Publishing Com-

mittee, and a vote of thanks was tendered Dr. Sutton for his elaborate report.

On motion of Dr. Ayers, \$175 of the money in the treasury, was voted to embellishing the printed report of the Society.

Dr. N. Field, of Jeffersonville, moved that "equine epidemic" be used in place of the more common, but erroneous appellation of "epizootic."

Several physicians objected and the motion was lost.

After which a recess until two o'clock was taken.

AFTERNOON SESSION.

The President being absent, on motion of Dr. Woolen, Dr. Boyd, of Dublin, Ind., assumed the chair.

On motion of Dr. T. M. Stevens, the chair was instructed to appoint a committee of eight to report upon the history of medicine in the State of Indiana, to report at the next annual meeting.

Prof. Mussey, of Ohio, was welcomed to a seat as a member.

Dr. Butler, of Dunreith, read an obituary of Dr. Canady, of Knightstown, as follows:

W. H. Canady, M. D., was born in North Carolina, April 5, 1821, and commenced the study of medicine in the office of Dr. D. Lindsey, of Gilford county, North Carolina, in 1842, and remained with Dr. Lindsey about one year; then went into the office of Dr. Clark, now of Carthage, Indiana, and remained there near eighteen months, when he married and removed at once to Indiana, where, not feeling content to practice medicine, he taught school for two winters, continuing his study. He then removed to Hamilton county, Indiana, and commenced the practice, residing there about three years, and then returned to Henry county, locating at Greensburg, where he remained six years. Thence he went to Knightstown, where he spent the remainder of his days, and with an unusual active practice, having graduated in the Cincinnati College of Medicine and Surgery in

1860, and on the 18th of May, 1873, he went from labor to reward, his wife having passed only thirty-six hours before. Both were buried in one grave.

Dr. S. G. Irwin read a paper on Cerebro-Spinal Meningitis, as it prevailed in Montgomery county, Indiana, in spring of 1872, which was referred.

This received the most discussion of any paper read during the session. The subject was considered of great importance, as it was a disease that often baffled medical skill and set the physicians at defiance.

Dr. J. J. Rooker read an essay upon "How to Obtain Practice."

Dr. C. E. Wright's paper was read by Dr. Hobbs, and together with Dr. Rooker's essay, was referred to the Committee on Publication.

During the session, the Committee on Admissions reported the following delegates for membership, who were accepted by the Society:

J. T. McCarthy, Valparaiso, Porter county, Ind.; E. S. Gale, Switzerland County Medical Society, Vevay, Ind.; M. F. Case, Fountain and Warren Medical Society, Attica, Ind.; W. H. Shulsey, Drake Medical Society, Crawford, Ind.; J. H. Ford, Northeastern Medical Society, Wabash, Ind.; E. N. Kneper, Lyman, Ind.; T. M. Kyle, Dearborn County Medical Society, Manchester, Ind.; H. H. Reeves, Mott Medical Society, Knightstown, Ind.; F. N. Smith, Hendricks County Medical Society, Plainfield, Ind.; John J. Inlow, Kisle Medical Society, Mannilla, Ind.; W. H. Mussey, Ohio State Medical Society.

EVENING SESSION.

The Society was called to order by the President, and listened to a paper by Dr. Sexton, of Rushville, upon Rupture of the Uterus. Referred to Committee on Publication.

The committee appointed to nominate a committee for the purpose of the organization of County Societies,

under a resolution on the subject passed at the last meeting of the Society, reported the following names, viz:

1st District—Drs. S. E. Mumford, Princeton; E. Murphy, New Harmony; W. R. Davidson, Evansville.

2d District—Dr. R. B. Jessup, Vincennes, to appoint his colleagues.

3d District—Drs. N. Field, Jeffersonville; W. McCoy, Jeffersonville; I. Slocum, New Albany.

4th District—Drs. M. Sexton, Rushville; L. J. Woollen, Moorefield; W. Bracken, Greensburg.

5th District—Drs. V. Kersey and R. Wiest, Richmond; G. Sutton, Aurora.

6th District—Drs. William Lomax, Marion; G. W. H. Kemper, Muncie; N. R. —, Greenfield.

7th District—Drs. J. H. Woodburn and R. N. Todd, Indianapolis.

8th District—Drs. W. R. Insley, Terre Haute; I. D. Maxwell, Bloomington; B. Newland, Bedford.

9th District—Drs. J. S. McClellan, Crawfordsville; T. B. Cox, Frankfort; W. F. Cady, Lafayette.

10th District—Drs. John Morris, Brookston; J. F. Beckner, Kentland; William Spencer, Monticello.

11th District—Drs. W. Scott, Kokomo; N. V. B. Newcomer, Tipton; W. N. Bell, Logansport.

12th District—Drs. J. S. Gregg, Fort Wayne; A. P. Mitten, Columbia City; W. B. Lyon, Huntington.

13th District—Drs. D. Wood and John Denser, South Milford; J. H. Cowan, Auburn.

Dr. Waterman moved that the President appoint a chairman, who, with the secretary, should appoint a committee to select statistics of the surgical history of the State, and of surgical operations performed during the year, and report at the next meeting. Carried.

The Chair appointed the following committees:

Committee on Prize Essays—Drs. Parvin, Mumford and Kemper.

Committee on Ethics—Drs. Kersey, Boyd and Gregg.

Committee on Arrangements—Drs. Davis, Tomlinson and Comingor.

Committee on Finance—Drs. Lomax, Wishard and Moffit.

Committee on Publication—Drs. Van Vorhis, Woolen, Elstun, Woodburn and Stevens.

Select Committee on Cerebro Spinal Meningitis—Drs. Waterman, Biglow and Comingor.

Committee on History—Drs. Stevens, Lomax, Casselberry, Ayres, Kersey, Sutton and Beckner.

Committee on the death of Dr. Fry—Drs. Irwin and Field.

Dr. Waterman chairmain of Committee on Surgery.

Dr. Butler read a paper upon the malformation of intestines and imperforate arnis.

A committee, with Dr. A. P. Williams as chairman, was appointed on obsterics.

Upon motion of Dr. Butler, the Society passed a vote of thanks to the President and Secretary.

Upon motion of Dr. Kersey, the Society passed a vote of thanks to the faculty of the Medical College for the use of the room.

The Society then adjourned until the third Wednesday in May, 1874, at 10 o'clock, A. M.

MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The National Public Health Association held its second annual session at Cincinnati on the 1st, 2d and 3d days of May. Many of the leaders in sanitary science in the country were present, including eminent statisticians and registrars from various States of the Union, executive officers of State and city boards of health, editors of sanitary journals and others. Only two persons from Michigan were present, Dr. Homer O. Hitchcock, of

Kalamazoo, member of the association, and also of our new State Board of Health, and Dr. Henry B. Baker, of Lansing, who has charge of the vital statistics of Michigan.

Letters from President White, of Cornell University, N. Y.; C. R. Agnew, M. D., of New York; Prof. Cabell, of University of Virginia; J. C. Nutt, M. D., of New York, (since deceased); F. Peyre Porcher, M. D., of Charleston, S. C., all members of the association, were received expressive of regret at their inability to attend the meeting of the association.

A communication was read from the Mayor of Providence, Rhode Island, inviting the association to hold their next meeting in that city. The association decided to accept the invitation, and instructed the Secretary to return thanks therefore.

The full time of the three days' session has been used in the delivery and discussion of valuable papers contributed by members of the association, and in debating other questions bearing upon the important subject of public health.

Among the papers read and discussed were the following: "On the Limitations and Modifying Conditions of Human Longevity, and the Practical Application of Sanitary knowledge," by Stephen Smith, M. D., of New York; "On the General Causes of Disease," by Wm. Clendenin, M. D., of Cincinnati; "On the Necessity of a National Sanitary Bureau," by C. C. Cox, M. D., of Washington, D. C.; "On a Uniform System of Registration of Diseases and Causes of Death," by Charles P. Russell, M. D., of New York; "On the Areas of Sanitary Administration, and the Practical Application of General Laws and Local Ordinances Relating to the Public Health," by Elisha Harris, M. D., of New York; "Sanitary Drainage of Towns and Cities," by John H. Rauch, M. D., of Chicago; "Quarantine, and the Official Methods of Sanitary Control of Contagious and Infec-

tious Diseases," by Henry Hartshorn, M. D., of Philadelphia; "The Homes of the American People, Where and What they will Be, as Determined by Physical and Sanitary Influences," by Prof. J. N. Newberry, of Cleveland; "On the Practical Lessons of the Recent Prevalence of Small-Pox, with Reference to its Prevention in the Future," by E. H. Janes, M. D., of New York.

There was no election of officers, and they remain as before, Stephen Smith, M. D., of New York, being President.

A business meeting was held every morning at 9 o'clock. The following resolutions were adopted during the session:

Resolved, That, in the judgment of this association, the establishment of a National Sanitary Bureau with relations to the General Government similar to those of the Bureau of Agriculture and Education, is highly desirable as a means of promoting sanitary science and the protection of public health.

Resolved, That in our opinion it is of the utmost importance that a common nomenclature and classification be adopted for the purposes of registration of deaths and diseases, and especially by the English-speaking people.

Resolved, That we regard the nomenclature and classification of diseases proposed by the College of Physicians of London, which has been extensively adopted in Great Britain and the United States, is more likely to be generally adopted for these purposes than any other system yet proposed, and that we hereby recommend its provisional adoption in the United States.

Resolved, That Dr. J. Woodward, Dr. Edward Jarvis, and Dr. E. M. Snow be appointed a committee to communicate the foregoing resolutions to Dr. Sibson, of London, and to negotiate for the representation of this association in the first decennial revision of the nomenclature.

Resolved, That the American Public Health Association deems it opportune that an international medical congress be requested to assemble during the American Centennial of 1876, in Philadelphia, to consider and

adopt a nomenclature and uniform classification of diseases in registration throughout the world.

Resolved, That boards of health be requested to make out their reports on vital statistics for the period beginning in January and ending December, and not for any financial municipal year.

Resolved, That the Committee on Registration be requested to prepare and present to this association a blank for uniform weekly and monthly reports of mortality in our cities.

Resolved, That a committee, consisting of Drs. Elisha Harris, Dorman B. Eaton, John Ordronaux and Stephen B. Smith, be appointed to consider the best plan for the appointment and organization of National, State and local boards of health, and that the discussion of this report be made a special order for business.

Whereas, It is important that boards of health of cities should at all times have as definite information as to the number, condition, and distribution of their population as practicable; and whereas it has been found practicable in other countries to collect such information, approximating correctness, through the aid of circulars properly prepared and distributed, which mode is attended with but little if any cost, and can be performed by the ordinary forms of the various boards of health; therefore be it

Resolved, That the local boards of health be recommended, whenever practicable, to take a census of their population annually, on the 1st of January, by the instantaneous mode—that is, through the aid of circulars, with blank inquiries upon all points of special interest to vital statistics and sanitary conditions, these blanks to be previously distributed to each family and housekeeper within the city, to be filled up by them at a fixed hour on the same day—the same to be called for on the following day by officers of the Board of Health, or by the police of the city, or by any other method that may be desirable.

Resolved, That all reports and papers be referred to the Executive Committee, with power to publish so much thereof and in such form as, in the judgment of the said committee, will be most promotive of the objects of the association, but the publication of a paper shall not be regarded as committing the association to the

opinion expressed by the author. The proceedings of the association are to be published in separate pamphlet form, under the title of "Proceedings of the American Public Health Association."

Resolutions of thanks were also passed to Dr. Murphy and to the Cincinnati Hospital for handsome receptions, to Dr. Clendenin for his personal attentions, and to the Cincinnati College and Cincinnati Law School for the use of their halls.—*Correspondence Detroit Post.*

MOTT MEDICAL SOCIETY.

GREENFIELD, HANCOCK CO., IND., }
May 1, 1873. }

Mott Medical Society met in Odd Fellows' Hall at one o'clock P. M., the president, Dr. Howard, in the chair.

Present—Martin, Reeves, Adams, Eubank, Hess, and Bowls.

The committee on membership not being present, the president appointed, *pro tem.*, Reeves, Martin, and Bowls to act upon the application of Dr. Bailey, who was present.

The committee, after consultation, reported favorably. A ballot being then taken, he was declared by the president duly elected. Dr. Bailey then signed the constitution and paid the usual fee.

Dr. Martin reported a case of hemiplegia in a female, aged thirty-seven, which was complete in right arm and leg, the face not being involved. The patient commenced to menstruate at the age of twelve, and for three or four months past has suffered more or less with perturbations such as are incident to the menopause. The patient's intelligence was not impaired, but she has amnesia of a number of words used in common conversation, such as "water," "cold," etc. The doctor thinks all the symptoms in the case are due to reflex action proceeding from a disordered condition of the menstrual

function, and thinks his diagnosis is confirmed by the fact that the paralytic attack occurred during the menstrual flux, and commenced to improve as soon as it abated—the improvement continuing uninterruptedly to complete recovery, except the amnesia, which still exists.

Dr. Hess reported a case of dystocia, caused by spastic rigidity of the os. Opium, in full doses, was tried, and the warm bath perseveringly used, but without any apparent effect. After two and a half days of labor, characterized much of the time by hard, expulsive pains, the Doctor requested a consultation with Dr. Canady. On Dr. Canady's arrival it was decided that as the patient's strength was failing, craniotomy was indicated for her safety. The head was accordingly perforated, the mother making a good recovery.

The members of the Society generally expressed their opinions upon the propriety of the course pursued in the case; and while they concurred in the correctness of the procedure, they would nevertheless, in similar cases, advise a resort to the numerous other means at our command for effecting dilatation, such as warm irrigation of cervix, manual force, chloroform by inhalation, etc.

Dr. Bowls then addressed the Society upon the subject of fever, maintaining that the normal heat of the body was mainly due to the oxidation of materials furnished the blood by the food, and that the preternatural heat of fever was mainly due to an increased combustion of the tissues of the body—the fat rapidly disappearing, by elimination through the lungs, in the form of carbonic acid, the albuminous tissues breaking down and passing out of the system through the kidneys in the form of urea and other nitrogenous excreta. The febrile process, therefore, is necessarily characterized by rapid loss of body weight, loss of heart force and general muscular strength. These premises being true, it becomes apparent that the treatment of all essential fevers necessa-

rily consists in keeping the temperature as low as possible, sustaining the heart's action, eliminating the debris of the decaying tissues, retarding retrograde metamorphosis until the febrile process is cut short, or until it is completed. To effect a reduction of the temperature and maintain it at the lowest possible degree, quinia, aconite, veratrum virida and water constitute the whole armament. To sustain the heart's action, digitalis and alcohol constitute our chief reliance. To maintain the general strength and retard histolysis, a full allowance of mixed food, with tea, coffee, and alcohol constitute our chief resources. If secretion fails and typhoid symptoms are thereby induced by the accumulation of noxious materials resulting from tissue decay, then eliminants come to play an important part in the treatment, but should never be given as long as the emunctories continue in active duty.

The Society then went into the election of delegates to the State Medical Society, and Bailey, Eubank, Carter, Hess, Reeves, and Bowls were chosen.

The Society then, by vote, requested the secretary to forward a copy of the day's proceedings to the INDIANA JOURNAL OF MEDICINE, with a request for publication.

There appearing no further business, the Society adjourned to meet in Knightstown on the first Thursday in June at one o'clock P. M.

S. J. BOWLS, Secretary *pro tem*.

HOWARD COUNTY MEDICAL SOCIETY.

The Howard County Medical Society met at Wilson's office, in Kokomo, at two o'clock, Tuesday afternoon. Dr. Wilson was called to the chair, and Dr. Mavity was chosen as Secretary. Members present—Drs. R. W. Smith, A. A. Covolt, D. S. Caylor, O. H. Martin, A. F. Dayhuff, W. K. Mavity, Wm. Scott, L. Kern, I. C.

Johnson, J. T. Scott and R. Q. Wilson. Visitors—Dr. Andy Pitzer, of Sharpsville.

Dr. Martin reported a case of abscess which was discussed at length.

The best methods of dressing and treating fractures of the thigh was discussed, and, on motion, was laid over for discussion at the next regular meeting.

On motion, a finance committee, consisting of Drs. Martin, Dayhuff and Mavity, was appointed.

On motion of Dr. Martin, Dr. Pritzer was made an an honorary member of the society.

On motion of Dr. Scott, Dr. Samuel Horn, Jr., was also made an honorary member.

On motion of Dr. Caylor, the Secretary was instructed to notify every member of his arrearage.

The committee appointed to prepare a memorial on the death of Dr. L. J. Benson, submitted the following resolutions:

WHEREAS, Dr. L. J. Benson has been removed from our society by Divine Providence; therefore, be it

Resolved, That in the death of Dr. Benson our society has lost a zealous and energetic member.

Resolved, That we deeply sympathize with the family and friends of the deceased in their bereavement; that we tender them our sincere condolence, and commend them to an Allwise Creator, who is ever ready to assuage the grief of bereaved hearts.

Resolved, That these resolutions be spread on the minutes of the society; that they be published in the INDIANA JOURNAL OF MEDICINE and Howard county papers, and that a copy be sent to the family of the deceased.

W. K. MAVITY,
O. H. MARTIN,
WM. SCOTT,

Committee.

There being no further business, the society adjourned to meet again on the first Tuesday in June.

Reviews.

THE OBSTETRICAL JOURNAL of Great Britain and Ireland, including Midwifery and the Diseases of Women and Children, edited by James H. Aveling, M. D., and Alfred Wiltshire, M. D., with American Supplement, edited by William F. Jenks, M. D., Obstetric Physician to the Philadelphia Dispensary. Henry C. Lea, Publisher, Philadelphia, Pa.

This is a very neat Journal of 74 pages, printed on good paper, and filled with interesting and truly valuable matter. Among others, a very readable article by Dr. Averill on William Harvey, in which he presents him in an "obstetrical" light. The supplement contains 16 pages. The Journal commences with the dedication, thus:

"DEDICATION.—On this first day of April, which happily chances to be the anniversary of his birth, we dedicate our Journal to the immortal memory of WILLIAM HARVEY, whom we rightly own, and proudly claim to be the Father of British Obstetrics: hoping that his patient mode of investigation, his philosophic method of induction, and his simple, truthful, noble spirit may inspire us in carrying out our investigations, forming our opinions, and publishing our convictions."

If subsequent numbers are as good as the present, it will prove a great addition to journalistic literature.

A TREATISE on the Principle and Practice of Medicine, designed for the use of Practitioners and Students of Medicine, by Austin Flint, M. D. Prof. Principles and Practice of Medicine, and Clinical Medicine, in the Bellevue Hospital Md. College. 4th edition. H. C. Lea, publisher, Philadelphia. Cathcart & Cleland, Indianapolis.

The author truly says, that "since the third edition, in 1858, the advances made in many departments of practical medicines, have seemed to call for a thorough revision." This we have no doubt is done in a manner

satisfactory to the profession. Dr. Flint's work, as is recognised by the profession, is one of the best of the kind we have; while not so full as Aiken's, and perhaps not so fascinating as Watson, he has harmonized the various subjects discussed, in such an order that convenience of reference is a marked feature, added thereto a short but common sense exposé of each, and it is *the* book of reference to the practitioner and teacher.

TEXT BOOK OF PHYSIOLOGY, General, Special and Practical, by John Hughes Bennet, M. D., F. R. S. E., etc., with twenty-one photo-lithographic plates. T. B. Lippencott & Co., 1873. 1 vol., 603 p. Price \$3.50. Cathcart & Cleland, Indianapolis.

This is one of the best, we will say *the* best *text* book upon the subjects treated, we have seen. Compact, but scientific, the subjects are divided into three parts as the title indicates. The first part embracing the chemistry, physiology, physical and vital properties of the tissues. The second—nutrition, enervation and reproduction. The third—practical, chemical and experimental physiology and practical histology. The use of the microscope is fully explained, it is the work nearest suited to the wants of the student we have, and fills a *hiatus* that has long been vacant.

OPHTHALMIC AND AURAL SURGERY REPORTS, by Julian J. Crisbalm, M. D., Prof. of Eye and Ear Surgery in the University of Maryland, and Surgeon in charge of the Baltimore Eye and Ear Institute. Baltimore, 1873.

These reports contain several cases of interest. Among others a cure of a case of apparent Bright Disease—diagnosed by condition of eye—cure of tobacco amaurosis—the efficiency of strychnia in amaurosis, etc.

THE FUNCTION OF THE EUSTACHIAN TUBE, in its relation to the renewal and density of the air in the tympanic cavity, and to the concavity of the membrane tympani, by Thos. F. Rembold, M. D. Saint Louis, 1873.

All would be benefitted by reading this paper as it is truly scientific. The text is strengthened by numerous cases reported.

OPHTHALMIC CONTRIBUTIONS—Dermoid Tumors of the Cornea, (reprinted from the American Journal of Medical Science, January, 1873), cypt of the iris removed by operation, An additional method for the determination of astigmatism; with an abstract from a paper on ophthalmometrical measurements of the conena and crystalline lenes, by George Strawbridge, M. D., Lecturer on Diseases of the eye and ear in University of Pennsylvania, etc. Lindsay & Blakiston, Philadelphia, 1873.

This is a very scholastic production, and is evidently intended for the specialist.

FAVORITE TRIOS FOR MALE AND FEMALE VOICES. J. Fischer & Bro., Dayton, Ohio.

We should imply "from the number of notes on a page," that this was a scientific thing, but not being "that way inclined," and our voice never having been cultivated, we will refer "the favorites" to the males and females.

Editorial.

THE INDIANA MEDICAL SOCIETY.—A short synopsis of the proceedings of this Society appear in this number. It adjourned on Wednesday until the third Wednesday in May, 1874. Some valuable papers were read, and a very valuable report upon the diseases incident to and prevailing in the different sections of the State, was presented by Dr. Sutton, of Aurora. We have no doubt, however, but some *keen scented* vulture of a critic, like our esteemed friend, Dr. B——, or John Smith, M. D., (see *clinics* of May 17), will select this first of any as a paper to be "frowned down," or "thrown out"—perhaps it is not suited for the pages of the transactions!

There are things that some of the physicians of Indiana need and have—others that they need and *have not*. Among the latter is *back-bone*, and with a few, common

sense. The first of these qualifications we profess to have "in an eminent degree," the latter we presume we have not, or we would not write this. But when we see men come, like whipped curs, because some kind friend and well-wisher applies the lash of criticism, and cry out for quarters, and hustles out their own pet production because some big-headed ass brays a ridicule, we feel like splinting their spinal column, or running a blister upon their glutii muscles. Some of them who now are—seemingly—so very careful of the purity of the various transactions, have been themselves caught in the bed of the harlot, (we do not refer to any within our own State), like the leper, they may strive to cover up their hideous epidermic incrustation, but here and there diseased patches will appear, revealing the true status of the individual. And yet these are the men that frighten us, and we, like children, seek to hide ourselves, and would blot out our *works* so that we might escape imagined punishment.

We have before remarked that Indiana has been behind, in many respects, of her sister States. We could scarcely account for it, but what can one expect from such weakly constituted material. This element of timidity and fear, is enough to keep back the best in the race that is before each of us. This we assert in all kindness, and moreover we know from personal experience the truth of such an assertion. We do not blame those who are thus easily affected, but we admonish them to cast such aside as much as possible, feeling what is true, that the generality of men are nearer upon a par than timid natures think, and those who vaunt themselves so highly, do so not so much because they are actually free of faults, but rather because *they* have taken in a truly literal sense the advice we give—cast aside their timidity and "*run their face.*"

WE call attention to the catalogue of Messrs. Lindsay

& Blackiston, which we sent with our last number. These gentlemen are issuing some valuable works, and in first class style.

WE hope all to whom bills were sent in last number, will respond promptly to same, as we are not ashamed to say *the money is needed*.

Miscellaneous.

ABUSE OF ALCOHOL.—One of the matters with which legislatures have for many years vainly struggled, is the regulation of the sale of intoxicating liquors. That a vast amount of suffering and crime may be directly traced to the vice of intemperance, needs no proof. But whether laws can be framed so as to check the evil at that stage,—at the point when it is most difficult to reach it, and when evasion is easiest, as witness the operation, or rather the ineffectiveness, of the so-called “Maine Law,”—we greatly doubt.

An easier and, we believe, a more practical way of accomplishing the object, would be to make the seller of liquor responsible in a due degree for whatever mischief might arise from this traffic. Let the man who knowingly furnishes the means of intoxication to any one already inebriated, or to any in the habit of drinking, be held as an accessory to any crime committed by his victim, and we are confident there would be fewer instances of such crime. As it is now, a man may prime another for any brutality, and go scot-free; he may see his customer become more and more excited, less and less able to control his passions, and still supply him with the maddening poison, knowing that he himself is held blameless for the result.

The great difficulty lies in the influence of the liquor-selling interest to prevent any legislation which would interfere with their trade, and in the opposition of a vast number of voters to any action which would hinder their free indulgence of appetite. Positive measures are of far more value than abstract generalities, in dealing with social abuses.—*Philadelphia Medical Times*.

NOTES ON PREPARATIONS OF PHOSPHORUS.—A good pill, it is said, may be made by dissolving one grain of phosphorus in half a drachm of chloroform, and rubbing it up in a mortar with two scruples of powdered liquorice, and when the chloroform is evaporated adding half a drachm of castile soap, and making into twenty-four pills, or as may be desired.

A very pleasant preparation of phosphorus, in the liquid form, is: Dissolve a grain of phosphorus in six drachms of chloroform, and add two ounces of good glycerine, and shake well. The glycerene forms a permanent union with chloroform, which dilution with water does not separate. Dose, a teaspoonful three times a day.

Hypophosphorus acid has not received that attention its merits entitle it to. As a remedial agent of the phosphorus family it is one of the most reliable. The hypophosphorus acid, in solution, enters the economy in combination with some of the fatty acids and glycerine combined, and forms a true nerve food and restorative. For children it is of decided advantage. The usual dose is from 10 drops to ʒss, with an equal quantity of glycerine in half to an ounce of some aromatic water.—*The Medical Archives*.

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No. 3.

Original Communications.

REPORT OF A CASE.

BY J. M. GREEN, M. D., BEECH GROVE, INDIANA.

In a railroad accident that occurred at Beaver Meadow, Rush county, Indiana, on December 22d, 1871, John Williams was scalded to the extent of the entire front aspect of the body, from clavicle to pubis, and posteriorly from nape to sacrum, leaving only a small surface of skin sound in each axilla. The whole surface indicated was denuded, the burn involving the full depth of skin in the sub-axillary, mammary and sub-mammary regions of both sides, the injury to the balance of surface being superficial. He also had fracture of left forearm.

He was not seen by the writer until five hours after injury. Had been visited by two surgeons, whose dressing consisted in a bottle of sweet oil poured in the open bosom of his flannel shirt, thinking nothing farther necessary, as he could not live.

In the first dressing I had the concurrent assistance of

Drs. Hobbs, of Carthage, and Pugh, of Rushville. Applied lard impregnated with carbolic acid, spread on cotton batting, held in place by roller around body. His condition being one of great prostration, he was given freely of anodynes and stimulants. Reaction was slow in coming up, not being established until the 25th, when he was seen by Dr. Tomlinson, of Indianapolis, who advised that the first dressing be not removed until suppuration is fully established. The patient has very little appetite, takes limitedly of soups and milk punch, tolerating anodynes, stimulants, and tonics, in full portions.

December 28, Prof. L. D. Waterman, in consultation, removed dressings—suppuration fully established. Applied to entire surface cloths wet in warm water slightly impregnated with carbolic acid, to be kept wet by a second layer dipped in same, and applied as often as necessary, which was discontinued after three days use as the attendants did not keep them properly wet. Again dressed with lard and carbolic acid, spread thickly on cloths—suppuration very copious—which dressing was continued ten days, when, with the advice of Dr. Pugh, the dressing was changed by adding basilicon ointment, making its composition two-thirds lard, one-third basilicon, with carbolic acid.

January 12, 1872, the posterior surface, from nape to sacrum, covered with cuticle. The sub-axillary, mammary and sub-mammary regions of both sides presenting a healthy surface of granulations, the full depth of skin having sloughed off. Grafted one dozen points in the granulated surface with skin from the calf of his brother's leg, inserting the grafts near one inch apart. Repeated the grafting every second or third day till January 22d, when the whole surface, except two points the size of a ten cent piece, was covered with new skin.

The number of grafts used about seventy-five, fifty of which grew; each of them forming an island of skin

extending and meeting its neighbors, and uniting with them without leaving mark of union. The patient's strength slowly improving, appetite good. The bowels during the whole case were constipated, requiring laxatives and enemata.

The anodynes were gradually withdrawn, also the stimulants, as the appetite improved. Diet mainly animal broths, eggs, milk, etc.

February 6, 1872, forty-five days after injury, was taken to his home, in Indianapolis. Lost sight of him for two weeks, when, on visiting him at request of his father, found him in the care of a surgeon who had been dressing the cicatrized surface with an old rancid salve, plastering on one coat after another, covering the surface and requiring to be scraped off, after which, and a thorough washing, there appeared a number of small superficial ulcers over surface where the burn had been the deepest. Ordered that he be washed daily with rain-water and carbolic soap, and dressed with basilicon and lard, equal parts.

Three weeks from this time he presented himself at my office, and I find surface well and smooth, except two points where there had appeared a disposition to exuberant granulation, requiring an occasional touch of lunar caustic.

RECAPITULATION.

1st. Re-action was very slow, and after being partially established, required free use of stimulants and anodynes; the heat only becoming normal; pulse never more than 100 per minute.

2d. The first dressing excluded the air effectually, but absorbed the secretions, becoming very offensive, and the only reason I can now see for its long application, five days, was the exhausted condition of the patient. Now think a daily dressing would have been much more comfortable and cleanly, thereby escaping the danger of

pyemia from the surface being bathed in the foetid secretions.

3d. The favorable termination of the case, as well as his exemption from serious internal complication, was due to his age, 19 years, previous good health, and especially to his temperate habits, never having drank or used tobacco, certainly an exception for one of his occupation, that of fireman on a railroad engine.

4th. The early covering of the surface with skin, was from the taking root and growing of the grafts of sound skin, which were cut out the full depth of the skin twice the size of a mustard seed, being still held in a sharp pointed dressing forceps and pushed down in the granulations, the forceps loosened and the granulations closing over and burying them from sight. On the first daily dressing after the insertion, there was no apparent effect. On the second, the granulations at the point being slightly paled. On the third dressing, there appeared a slight circular flattened depression, four lines in diameter, the granulations forming a ridge around the patch. From the fifth to the sixth dressing, these patches took on the appearance of true skin, and at once began spreading, becoming near an inch in diameter before coalescing with each other. The *extension* was first by a circle of granulations, becoming pale in color, then flattening, then taking on appearance of true skin, the unions with each other leaving no mark, and when the patient was last seen, October 24, 1872, skin presented a uniform smooth appearance, there being no deformity nor disposition to contraction of cicatrix, so common after such injuries, his recovery being so complete that he has returned to his avocation. The fracture of forearm united favorably.

REPORT OF A CASE OF PNEUMONIA.*

READ BEFORE THE MOTT MEDICAL SOCIETY, JUNE 22, 1872,
BY N. H. CANADAY.

J G, aged about 55, was a soldier in the Union ranks during the late war. Discharged three different times on account of disability; once on account of a wound from a musket ball which entered just above the border of the illium, an inch to the right of the spine, which he thinks is still in him. The last time he was discharged on account of chronic bronchitis, from which he has never entirely recovered, and on account of which he is now drawing a pension. He is an iron-smith by trade, has not felt as well as usual for a week past. On Saturday, 27th of April, 1872, he complained of general malaise and prostration; Sunday, the 28th, was attacked with pain below scapula and about two inches to the right of the spine, confined to a small space; the pain was keen, lancinating, and intermitting in character, soon shifting to right hypochondriac region, from thence to right shoulder and side of neck, producing stiffness of the muscles of the neck, after which the pain partially subsided in the chest, and he had a severe attack in the right iliac regions from which it shifted to a point just below right nipple, from which it afterwards always appeared to start and radiate in different directions, still retaining something of an intermitting character.

On Monday morning, the 29th, he walked out to his shop, but soon returned and laid down on a lounge, but feeling a difficulty in breathing, and a sense of suffocation, he attempted to walk to the door when he fainted, falling on the floor, and was assisted to the bed when a physician was called, (a physio-medical), who by the way is a gentleman, under whose care he was until Friday,

* This article was written only a few days before the death of the author.

May 3d, at 3 o'clock, at which time I just saw him and obtained the above history.

He says the pains have been constant since Monday morning, with frequent paroxysms of increased severity, darting from a point just below right nipple in various directions, but generally toward top of sternum; has slept none, or at least thinks he has not been asleep since Sunday night; has been taking various anodynes, amongst which were said to be pretty large doses of dovers powder, without any relief—has taken no nourishment. Pupils said to have been slightly dilated continuously, and pulse ranging from 100 to 112, with a temperature ranging from 99 to $102\frac{1}{2}$, urine scanty and high colored, etc.

Friday, May 3d, 3 o'clock P. M., he is very restless, raising up in bed, leaning forward, then laying down, &c. Complains of severe pains starting under right nipple and radiating in different directions, but generally towards top of sternum; says he feels easiest sitting up leaning forward; countenance indicative of much suffering, looks pale, eyes sunken, skin moist and apparently about natural temperature, tongue heavily coated with a yellowish coat, and moderately dry, pulse 112 to minute, temperature 100 in axilla, respiration 36, pupils slightly dilated, some tenderness along upper portion of spine, bowels moved this morning from the effect of purgative, lower two-third of right lung dull on percussion with bronchial respiration.

Treatment—Gave, by estimate, opium gr. ii, and apply flannels wrung from hot water to chest, &c.

Saw him again in a couple of hours, he is now comparatively easy, inclined to sleep, and skin moist.

Treatment—Opium gr. i; quin. sul. gr. ii: to be taken every four hours. Carb. ammonia every two hours, with opium powders to be taken if necessary, to keep pains quieted. Apply mustard to side, followed by

hot wet bandage, covered with dry; give cream and beef tea, &c.

Saturday, May 4th, 10 P. M., has been quite comfortable since last visit; slept well last night, not hard to arouse, countenance anxious, eyes sunken and dull, coat on tongue brown or nearly black, sordes on teeth; pulse 120, respiration 28, temperature $98\frac{1}{2}$, has been coughing since midnight and expectorating a prune juice sputa; complete dullness over lower portion of right lung, respiratory murmur inaudible, over upper portion of same, with bronchial breathing; takes cream frequently but in small quantities.

Treatment—About the same as yesterday, except insist on his taking more cream and beef tea, and add alcoholic stimulants.

Sunday, the 5th—Not much different from yesterday, except tongue cleaning, expectorations more profuse, cough loose and not very troublesome, pulse and respirations same as yesterday, temperature 98. Treatment continued.

Monday morning, the 6th—Not much difference in subjective symptoms from yesterday, his friends express themselves very hopeful as to the termination of his case this morning. Upon examination find his pulse 124, respiration 34, temperature 103, with fine crepitation over lower portion of left lung.

Treatment—Push tonics and stimulants, continue external applications, &c.

Tuesday, the 7th—Countenance haggard, surface cool and clammy, tongue moist and flabby, cough hacking and troublesome, very little expectoration, pulse 120, small and thready, respiration 40, temperature not taken on account of patient's restlessness. Died at 7 P. M.

POST MORTEM 15 HOURS AFTER DEATH.—Rigor mortis well marked; all the depending parts livid from hypostatic congestion; cavity of thorax opened in the usual manner, both pleural cavities contained bloody

serum, quantity not measured, the right containing the most, probably from 12 to 14 ounces; numerous old firm adhesions between the pleural surfaces on both sides, and between lungs and diaphragm; lower portion of right lung almost completely carnified, middle portion in a state of gray hepatization, upper portion congested, &c.; numerous bands of thick false membrane in a state of formation at different points within right pleural sack; left lung in a state of red hepatization in its lower fourth and congested for some distance higher, a number of patches of semi-organized exudate forming between the surfaces of the pulmonary and costal pleura on this side, also the proximate surfaces of the pericardial sac were so firmly united as to give the idea of its being one solid membrane; outer surface covered with a substance resembling pus; blood everywhere fluid and very dark.

This case gentlemen, has, I think, several points of interest. The shifting, intermitting character of the pains, the absence of cough and expectoration during the first five days, the amount of disease in the lungs, and yet the man living as long as he did, etc.

Proceedings of Societies.

AMERICAN MEDICAL ASSOCIATION.

The twenty-fourth annual session convened in Saint Louis, Mo., on Tuesday, May 6, 1873.

Dr. D. W. Yandell, of Kentucky, opened the session.

Rev. Dr. S. J. Niccolls, of St. Louis, opened the proceedings with prayer.

An address of welcome to the delegates was made by Dr. J. S. Moore, on behalf of the Committee of Arrangements.

Dr. T. M. Logan, of California, President elect, was invited to preside.

Dr. J. B. Johnson, Chairman of the Committee of Arrangements, made a few remarks, and presented the roll of delegates and members, as already registered, for approval.

(448 members were registered during the session.)

Dr. Johnson announced the places of meeting for the sections, and the hours for holding the sessions, after which he presented the following programme, all of which was adopted :

Monday evening there will be a *soiree musicale* at Mercantile Library Hall, commencing at 8 o'clock. A band has been engaged and arrangements made with Pezolt for refreshments. The wives and daughters of the physicians are expected to be present.

Tuesday evening there will be held a *levee* at the residence of Col. L. D. Morrison, corner of Locust street and Leffingwell avenue.

On Thursday evening Dr. J. J. Woodward, U. S. A., of Washington, will, by especial request of the Committee of Arrangements, deliver the Toner lecture at Masonic Hall.

On Friday afternoon the visitors will view Lafayette Park, Tower Grove and Shaw's Garden. Carriages to leave the hall at two o'clock.

As there are some delegations contested, all these cases were at once referred to the Committee on Ethics.

The President announced as the Committee on Ethics for 1873, Drs. N. S. Davis, Illinois; E. L. Howard, Maryland; H. F. Askew, Delaware; D. W. Yandell, Kentucky, and J. M. Toner, District of Columbia.

The President then delivered the annual address, Vice President Dr. B. H. Catlin, of Connecticut, presiding.

On motion of Dr. W. Brodie, of Michigan, thanks were tendered the President for his address, and it was referred to the Committee of Publication.

Dr. E. L. Howard, of Maryland, offered his report of the Committee on Better Arrangement of the Sections, etc., which was made the special order for Wednesday at 10 o'clock.

Dr. J. J. Woodward, U. S. A., offered a paper on Rank in the Army, which was made the special order for Wednesday at 11 o'clock.

The Committee on Nomenclature of Diseases, offered their report, which was made the special order for Thursday at 10 o'clock.

The report of the Committee on American Medical Necrology was presented by the chairman, Dr. J. D. Jackson, of Kentucky, and on motion was referred to the Committee of Publication.

The Report of the Committee on Suggestions in Medical Education, Dr. A. M. Pollock, of Pennsylvania, chairman, was offered and made the special order for Thursday at 11 o'clock.

Several voluntary communications were offered and referred to the appropriate sections.

On motion, it was agreed that the several States should report their members of the Committee on Nominations at the opening of the morning's session.

On motion, the Association adjourned.

SECOND DAY.

The President called the Association to order at 10 o'clock, A. M.

The several States reported their members of the Nominating Committee as follows:

Alabama, G. Moses; Arkansas, A. L. Breysacher; Connecticut, W. A. M. Wainwright; Delaware, H. F. Askew; District of Columbia, F. Howard; Georgia, J. P. Logan; Illinois, H. A. Johnson; Indiana, W. H. Meyers; Iowa, A. M. Carpenter; Kansas, D. W. Stormont; Kentucky, R. H. Gale; Maine, A. Garcelon; Maryland, S. P. Smith; Massachusetts, L. F. Warner; Michigan, W. Brodie; Minnesota, A. B. Stuart; Mis-

souri, J. B. Johnson; Mississippi, J. W. M. Shattuck; New Hampshire, E. E. McQuestan; New Jersey, S. Lilly; New York, H. W. Dean; North Carolina, R. J. Hicks; Ohio, A. Dunlap; Pennsylvania, W. J. Asdale; Rhode Island, L. Morton; Tennessee, W. T. Briggs; Texas, D. R. Wallace; Virginia, F. D. Cunningham; West Virginia, G. Baird; Wisconsin, E. P. Russell; U. S. Army, B. A. Clements; U. S. Navy, C. Eversfield.

The Committee of Arrangements reported a number of additional delegates, members by invitation, and permanent members.

On motion of Dr. Davis, of Illinois, the list as read was approved, except the members by invitation, which list was referred to the committee for revision.

An invitation for the Association to meet next year in Detroit, was read and referred to the Nominating Committee.

Special Business being in order, the report on Better Arrangement of the Sections was read by the chairman, Dr. E. L. Howard, of Maryland.

The committee suggested that all lengthy papers be referred to a sub-committee, to determine as to the advisability of bringing them before the sections. Each section to have a sub-committee for this special purpose.

Effective action was urged on the important subject of medical instruction. That all questions of a personal character, complaints, and on credentials, be referred to the Committee on Ethics without discussion. That the Committee on Ethics be constituted of not less than nine members, to be selected by the Nominating Committee, and to serve for three years. The following arrangement for sections was suggested in place of that now existing:

1. Practical medicine, materia medica and physiology.
2. Obstetrics, and diseases of women and children.
3. Surgery and anatomy.

4. Medical jurisprudence, chemistry and psychology.

5. State medicine and public hygiene.

The committee demanded a more rigid examination of all papers offered for examination, and thus cut off all that are stale, loose, or verbose, and not calculated to reflect credit on the Association.

A minority report was presented by Dr. Bronson, of Massachusetts, who objected to the suggestion about the Committee on Ethics. He wanted them to be appointed annually instead of serving for three years.

On motion of Dr. Davis the report and accompanying resolutions, amending the Constitution, except that relating to the Committee on Ethics, were unanimously adopted.

Dr. Davis offered a substitute for the resolution on the Committee on Ethics, that a committee, known as the Judicial Council, be appointed, consisting of twenty-one members, seven elected for one, seven for two, and seven for three years, and annually thereafter seven members should be elected, to whom should be referred all matters of ethics, etc.

The substitute was unanimously adopted.

A letter from Dr. S. D. Gross, of Pennsylvania, was read, advocating certain amendments, and Dr. Davis then offered the following:

Resolved, That all relating to Committees on Medical Education, Medical Literature, and Climatology and Epidemic Diseases, be stricken out, in accordance with the amendment proposed by Dr. Gross, in 1872, and add—

XII. *Addresses*. It shall be the duty of the Nominating Committee to appoint annually, three members, who shall deliver addresses before the Association at the next annual meeting after their appointment—one on Medicine, one Surgery, and one on Obstetrics and Diseases of women—no one address to occupy more than 40 minutes.

After much discussion, on motion of Dr. E. L. Howard, the resolutions of Dr. Davis were laid upon the table.

On motion of Dr. Tood, of Kansas, the report of the committee and all the resolutions attached were adopted in full.

Dr. J. J. Woodward, U. S. A., then read a memorial from the medical officers of the army asking for increased rank, etc., and asking the aid of the Association to procure what they desired.

On motion of Dr. J. M. Keller, of Kentucky, it was

Resolved, That in the opinion of this Association, the rank of medical officers of the army ought to be fully equal to that of officers of any other staff corps, or of the medical corps of the navy; that we learn with regret that this is not the case, and that we regard with grave disapproval the odious discrimination thus made against a meritorious body of officers.

Resolved, That we look upon the law which prohibits promotions and appointments in the medical corps of the army as unwise and unjust, and that in our opinion it ought forthwith to be repealed.

Resolved, That a Committee of five be appointed by the President to memorialize Congress on this subject, and that each member of this Association pledges himself to use all his influence with the member of Congress from his own district in behalf of the objects of these resolutions.

Committee—Drs. J. M. Keller, Kentucky; H. F. Askew, Delaware; J. M. Toner, District of Columbia; J. A. Murphy, Ohio, and N. S. Davis, Illinois.

The report of the Committee on Medical Education was read by the chairman, Dr. John Carson, of Ohio, and referred to the Committee of Publication.

The report on Medical Literature was read by Dr. L. P. Yandell, Jr., of Kentucky, and similarly referred.

The reports of the Committee of Publication, of the Treasurer, and of the Librarian, were read and similarly referred.

Dr. J. M. Toner presented a large number of valuable statistics as to hospitals, medical societies, etc., in the United States, which were referred to the Committee of Publication with discretionary power.

The Secretary read Dr. J. M. DaCosta's memorial on Dr. S. H. Dickson, as ordered at the last session, and on motion, the resolution appended was adopted, and the memorial ordered to be spread upon the minutes.

Dr. John S. Moore, of St. Louis, chairman of the Committee on Prize Essays, announced that only one such production had been received, and it was not deemed worthy of any of the prizes offered.

The Secretary read a list of names of those who had been appointed to represent the American Medical Association to the British Medical Association, and announced that the commission of delegates would be made out immediately.

The following named gentlemen compose the list: Drs. F. G. Smith, C. Wister, J. S. Cohen, of Philadelphia; Dr. E. Warren, of Baltimore; Dr. C. L. Ives, of New Haven; Dr. Edward Montgomery, of St. Louis; Drs. F. Barker, E. Seguin and J. C. Hutchison, of New York; Paul F. Eve, Tennessee; J. A. Alexander, Virginia; C. J. O'Hagan, South Carolina.

The Committee on Nominations, through their chairman, Dr. J. B. Johnson, reported in part as follows:

Your committee suggest the following gentlemen for the various offices named:

President.—Dr. J. M. Toner, District of Columbia.

First Vice-President.—W. Y. Gadberry, of Miss.

Second Vice-President.—J. M. Keller, of Kentucky.

Third Vice-President.—N. C. Husted, of New York.

Fourth Vice-President.—L. F. Warner, of Mass.

Treasurer.—Dr. Casper Wister, of Philadelphia.

Librarian.—Wm. Lee.

Committee on Library.—Johnson Elliott.

Assistant Secretary.—Theodore A. McGraw, Detroit.

Committee on Arrangements.—Dr. W. Brodie, Chairman; James A. Brown, Morse Stewart, J. F. Noyse, E. W. Jenks, Henry F. Lyster, D. O. Farrard, Eugene Smith, all of Detroit.

Committee on Prize Essays.—Drs. J. K. Johnson, A. Sager, H. Hitchcock, of Detroit; E. Andrews, of Illinois; E. S. Gaillard, of Kentucky.

Committee on Publication.—Drs. F. G. Smith, W. B. Atkinson, D. Murray Cheston, of Pennsylvania; Wm. Lee, of District Columbia; Casper Wister, of Pennsylvania; H. F. Askew, of Delaware; Alfred Stile, of Pa.

Detroit was named for the next annual meeting of the Association.

This report was adopted by the Association.

The Treasurer of the Association made a report, setting forth the fact that there was a balance in the treasury of only \$496 76, owing to the heavy expense attending the publication of the proceedings of the last annual meeting.

At this point in the proceedings, an invitation was received and accepted to visit the Missouri Institution of the Blind.

Dr. Davis, of Chicago, proposed an amendment to the Constitution, as follows:

“The delegates shall receive their appointments from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by representation in their respective State Societies, and from the Medical Department of the Army and Navy of the United States.”

Also “each State, County and District Society entitled to representation, shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number. The medical staffs of the Army and Navy shall be entitled to four delegates each.” Laid over.

Dr. Brodie, of Detroit, proposed that a committee of one from each State be appointed, whose duty it shall be to revise the code of Ethics, and report at the next annual meeting; but, at the suggestion of Dr. Woodward, the subject was referred to the Judicial Council.

Dr. J. F. Matchett, of Texas, offered a paper on Yel-

low Fever, etc., which was made the special order for 12 o'clock, Thursday.

A paper by Surgeon A. L. Gihon, U. S. N., on Medical Education, was referred to the Committee on Medical Education.

Dr. Frederick Horner, Jr., U. S. Navy, offered a resolution that the American Medical Association appoint a committee of one member from each of the original thirteen States of the Union, to report to the centennial celebration on the medical, surgical, and biographical literature of the period of 1776.

As a tribute to Joseph Warren, Benjamin Rush, Arthur Lee, Gen. Hugh Mercer, and other noble and patriotic physicians who aided to secure American independence, the resolution was adopted.

On motion of Dr. Peck, of Iowa, in view of the fact that the reports of the Surgeon-General of the U. S. Army, as exhibited in volumes one and two of the first part of the Medical and Surgical History of the War of the Rebellion, have received a too limited circulation by reason of an insufficient issue of the same by Congress, it was

Resolved, That the President and Secretary of this Association, be directed to petition Congress at the next session in behalf of the profession, asking that the edition recently issued be reproduced in sufficient number to permit of general distribution to the members of the profession throughout the country.

Resolved, That the thanks of the Association are due and are hereby tendered Congress for aiding thus far in developing and presenting to the profession the reports of the Surgeon-General as herein specified.

Resolved, That the thanks of this Association are hereby tendered the officers of the United States Army who have by sacrifice and labor been instrumental in placing before the profession the valuable information contained in volumes one and two of the first part of the Medical and Surgical History of the War of the Rebellion.

The Association adjourned to meet on Thursday.

LEVEE AT THE RESIDENCE OF COL. MORRISON.

The members of the Association were entertained on Tuesday evening at the elegant mansion of Col. J. L. D. Morrison, Locust street and Leffingwell avenue. There was a large and brilliant assemblage, and the honors were rendered by Col. Morrison, Mrs. Morrison and daughter, in a manner which made the affair a notable one.

THIRD DAY.

The President called the Association to order at 10 o'clock. The Secretary read the report on Nomenclature, as follows:

In accordance with the resolutions appended to the minority report of the committee adopted by the Association at its last meeting, 1000 extra copies of the proposed nomenclature were printed in pamphlet form and distributed to the profession and to the various Medical Journals, both at home and abroad; and such criticisms and suggestions as would represent their opinions as to its merits and fitness, were invited from those receiving it. To this invitation not a single response has been made by Medical Journals, and but from two practitioners, the latter being such additions as in the judgment of these gentlemen would render the work more complete, but which, in the judgment of the majority, describe conditions which none but a specialist could recognize. From this statement of the results of a year's consideration of the proposed nomenclature, the conclusion may be drawn that the profession are satisfied with the work. Your committee are not willing to entertain the only other conclusion, that men of culture and practical men are indifferent upon a subject of such importance; they therefore again present the resolution appended to the majority report and ask for its adoption:

Resolved, That the report of the Committee on the Nomenclature of Diseases be referred to a special committee of five members, to be appointed by the Persi

dent, who shall examine it and report upon its final disposition at the present meeting of the Association.

Resolved, That, on the favorable report of such committee, it shall be referred back to the Committee on the Nomenclature of Diseases, for the preparation of an index to be published with it, in the forthcoming volume of the transactions.

Dr. Atkinson, of Pennsylvania, moved the report be received and the resolutions be adopted.

Dr. Woodward, of the United States Army, thought he could offer some good reasons why the report should not be received, and went on to show the inferiority of the American system of nomenclature to that of the British Association, copies of which had been sent to this country, and one of which he had personally presented to the Medical Association of New Orleans, where he had been induced to vote against its adoption. This step he had since regretted, for upon comparing the Philadelphia nomenclature, now in use in this country, with the English, though at first sight there did not appear to be much difference, it would be seen upon a careful review how far superior that of the Royal College of Physicians of England was to that now in use here, and it seemed to him that, as it was certainly advisable to have some nomenclature which should be recognized wherever the English language was spoken, it would be advisable, until some definite plan was adopted, for that of England to be used, there being so many grave faults in that of Philadelphia as to render its adoption inexpedient. He concluded by offering the following resolutions, which were adopted:

“Resolved, That, in the opinion of this Association, it is inexpedient to adopt the nomenclature and classification presented by the majority of the Committee on Nomenclature at the meeting in Philadelphia.

“Resolved, That a committee of three be appointed by the President, whose duty it shall be to communicate the foregoing resolution to the proper committee of the Royal College of Physicians of London, and to nego-

tiate for the representation of the American Medical Association in the first decennial revision of their nomenclature."

The resolutions of Dr. Woodward were adopted. Committee: Drs. Woodard, Edward Jarvis, of Mass.; A. Stillé, Philadelphia.

The Committee of Arrangements reported the following physicians for election as permanent members:

Edward Stewart, Mendon, Michigan; G. L. Polk, Æola, Illinois; John Shore, St. Louis; A. Goodenough, Idaho City; Daniel Lichty, Rochelle, Ill.; B. F. Edwards, Kirkwood, Mo.; L. A. Grimes, Concordia, Ill.; C. W. Crary, St. Louis; S. T. Newman, St. Louis; Geo. F. Center, Olney, Illinois; J. E. Faper, Chas. F. Ludwig, St. Louis; Dr. Randall, Warren county, Ill.; W. W. Vinnedge, Lafayette, Ind.; R. J. Mitchell, Lewis Wilcox, R. J. Allmond, W. C. Day, R. S. Cowan, and Edward Blakesley, Ill.

On motion of Dr. Davis, of Illinois, they were unanimously elected.

The President read a letter from Dr. H. R. Storer, now residing at Montone, on the Mediterranean, for the benefit of his health, who had been giving his attention to the subject of climatology, asking that he might be appointed on a committee to inquire into and make a report on the relative advantages of American and foreign water cures, which was referred to the Committee on Nominations.

On motion of Dr. Toner, it was

Resolved, That, in the opinion of this Association, it would be an opportune occasion, at the Centennial celebration of 1876, for holding an International Medical Congress, to consider, and if practicable, adopt a uniform classification and nomenclature of diseases, to be used by the profession throughout the world.

Dr. Davis read the report of the unfinished business of the Committee on Ethics of last year, as follows:

"Dr. de Marmon held credentials as a regular delegate from the Westchester County Medical Society, in

New York, to the meeting of the Association in 1872. But at that meeting a protest against his admission was made, on the ground that he was on trial for unprofessional conduct in his local society. The subject was referred to this committee at so late a period of the meeting that it could not then be acted upon. From the evidence recently presented to our committee, it appears that the trial of Dr. de Marmon is still unfinished in the Westchester County Medical Society; that said Society has formally withdrawn his credentials as delegate to this Association, and consequently no present action in the matter is required by this Association.

“At a meeting of the Association in Philadelphia, May, 1872, objections were made to the admission of delegates from the Pathological Society of Berks county, Pa., on the ground of non-professional conduct on the part of many of the members of that Society. Time not permitting a full hearing of the case during that meeting of the Association, a report on it was postponed until the meeting of the Association. In the meantime the accused parties were duly notified of the charges and requested to make answer thereto. After a full investigation of them, your Committee on Ethics, appointed in 1872, declare a sufficient number of the charges sustained to justify the recommendation that the said Society be not allowed a representation in this Association.”

After some remarks by several of the members, the report was adopted.

A report was presented by Dr. Davis, the chairman of the committee appointed last year to consider the question of the Secretary's salary, recommending that no specified sum be fixed as his remuneration, as they would be unable to retain the services of so able a Secretary as Dr. Atkinson, because, while the office was now comparatively honorary, members could not demand as a right such attentions as they would expect if the Secretary were in receipt of a fixed salary; besides, the funds

Proceedings of Societies.

at the disposal of the Association were not sufficient to enable them to offer sufficient remuneration to Dr. Atkinson to induce him to give so much of his time to the duties as the demands of members would exact from him; they therefore thought it would be better to name no specific sum, thus leaving the Secretary in a comparatively independent position in his relations to the Association.

It was finally agreed that the report be adopted, and that the sum of \$500 be given the Secretary as an honorarium, provided that said amount be left in the treasury after defraying the expenses of publishing the transactions, etc.

Dr. A. N. Bell, of Brooklyn, New York, offered the following resolutions:

Resolved, That, in the judgment of this Association, the establishment of a National Sanitary Bureau, with relation to the general government similar to those of the Bureaus of Agriculture and Education, is highly desirable as a means of promoting sanitary science and the protection of public health.

Resolved, That this Association request the United States Educational Bureau to so extend the scope of its inquiry as to include vital diseases and mortuary statistics in relation to local, meteorological and geological influences, and to disseminate the information so collected throughout the country.

Considerable discussion ensued, and the resolutions were finally adopted, and referred to the Committee on Public Hygiene and State Medicine.

The Chairman called up the special order set for 11 o'clock, and Dr. Pollock, of Pittsburg, Pennsylvania, presented the report on Medical Education, as follows:

"The committee appointed by the President at the last meeting of the Association, to take into consideration the propriety of adopting the suggestions of the Committee on Medical Education, are fully impressed with the importance of the subject, and acknowledge the value of the suggestions offered. But we believe it wholly impracticable to carry into operation any law

which does not meet the hearty approval of the diverse interests connected with the teaching and practice of medicine; and while we have no doubt that this Association has grown to be a power in the profession, felt and recognized by all, yet to make its power effective, its decisions should be calm and deliberate. Therefore your committee, after due deliberation, have concluded to recommend the adoption of the conclusion of the report of the Committee on Medical Education, which is as follows:

"That a Congress composed of two members from each State and Territory, and one from each recognized Medical College, all to be members of this Association, be appointed (or nominated by the Nominating Committee) at this present session; that said committee or Congress shall meet three days previous to our next annual meeting, and that said committee or Congress shall perfect a plan for some uniform system of medical teaching, which, when adopted by the Association, shall be the only recognized method of medical teaching in the United States."

After a long and animated debate, during which the report was approved and reconsidered, it was finally laid on the table.

Dr. W. M. McPheeters, of St. Louis, brought forward the proposed amendment to the Constitution presented last year, by which it was sought to place the United States Marine Hospitals in the same relative position in the Medical Association as the Medical Departments of the Army and Navy, and it was laid over till the next annual meeting.

Dr. Davis, on behalf of the committee appointed to devise and recommend some plan for securing a more complete report of the doings in the several sections, submitted the following resolutions, which were adopted:

Resolved, That the Committee of Arrangements for each annual meeting of the Association are instructed to secure the services of a sufficient number of phonographic reporters, to have one in attendance on the regular sessions of each of the sessions in the afternoon, as well as during the general morning sessions. That the

reports thus obtained be printed the same evening, on slips or proof sheets, in sufficient number to supply all the members of the Association in attendance early the following morning.

The second resolution provides for the method of providing for the expenses hereby incurred. The third resolution provides for the selection and revision of the most valuable parts of the proceedings, and their transmission to the Secretary for publication within twenty days after the adjournment of the Association.

On motion of Dr. R. M. Bertolet, Pennsylvania, it was

“Resolved, That the President appoint a committee of three to report at the next annual meeting upon the progress of Otology.

Committee; Drs. D. B. St. John Roosa, New York; Bertolet, Pennsylvania; and S. Sexton, New York.

On motion of Dr. Howard, Maryland, it was resolved that the chairman of the several sections shall have free scope in the selection of subjects for addresses.

A motion by Dr. Keller, of Kentucky, to change the name of Judicial Council to Medical Senate was lost by a close vote.

Dr. J. J. W. Angear, of Iowa, offered the following resolution, which was carried by acclamation:—

“Resolved, That we hereby tender our sincere thanks to Colonel and Mrs. J. L. D. Morrison, for the hospitality extended to and so greatly enjoyed by this Association last evening.”

A member introduced a resolution pledging the Association, individually and collectively, to discontinue the use of alcoholic stimulants in prescriptions and as beverages, which was most emphatically ruled out of order, the same resolution having been presented last year, when a too free use of alcohol had been pronounced against.

The time for the next annual meeting, in Detroit, was

fixed for the first Tuesday in June, May being considered too cold a month.

Dr. Davis made a suggestion affecting the utility of the meeting of the sections and the convenience of delegates wishing to attend them. He referred to the want of space and facilities for the proper attention being given to these matters, and the slim attendance which had been the result, and expressed the hope that better arrangements would be made at Detroit in this respect than they had found hitherto.

The paper on yellow fever, presented on Wednesday, was referred to the committee on Practice of Medicine.

Dr. E. L. Howard offered the following amendment, which was laid over until the next annual meeting:—

“Resolved, That article 4 of the Constitution be amended, as follows: Strike out second clause of first paragraph and insert, “They shall be nominated by the judicial council, and shall be elected by vote on a general ticket.”

Dr. Johnson, chairman of the committee on nominations, then presented the following report on nominations for chairmen and secretaries of sections for 1874:

1. Practice of Medicine, Materia Medica and Physiology, Dr. N. S. Davis, of Chicago, chairman, and Dr. Frothingham, of Ann Arbor, Mich., secretary.

2. Obstetrics and Diseases of Women and Children, Dr. Theodore Parvin, of Indianapolis, chairman, and Dr. Montrose A. Pallen, of St. Louis, secretary.

3. Surgery and Anatomy, Dr. S. D. Gross, of Philadelphia, chairman, and Dr. Alonzo Garcelon, of Maine, secretary.

4. Medical Jurisprudence, Chemistry and Psychology, Dr. A. N. Tally, of South Carolina, chairman, and Dr. E. L. Howard, of Maryland, secretary.

State and Public Hygiene, Dr. A. N. Bell, of Brooklyn, chairman, and Dr. A. B. Stuart, of Winona, Minn., secretary; F. A. Ross, Alabama; D. A. Linthicum, Arkansas; T. M. Dogan, California; R. G. Buckingham,

Colorado; B. H. Catlin Conn.; L. P. Bush, Del.; F. Howard, D. C.; W. F. Westmoreland, Ga.; H. A. Johnson, Ill.; W. H. Myers, Ind.; J. J. Angear, Iowa; D. W. Stormont, Kansas; L. Rodgers, Ky.; S. Fitch, Maine; H. I. Bowditch, Mass.; R. C. Kedzie, Mich.; A. B. Stuart, Minn.; J. W. M. Shattuck, Miss.; John T. Hodgen, Mo.; J. H. Parsons, N. H.; E. M. Hunt, N. J.; A. N. Bell, N. Y.; W. A. B. Norcom, N. C.; Wm. Clendenin, Ohio; A. M. Pollock, Penn.; G. M. Lenore, R. I.; R. A. Kenlock, S. C.; W. T. Briggs, Tenn.; R. R. Wallace, Texas; J. L. Caball, Va.; James Brownfield, West Va.; H. B. Strong, Wis.; A. F. Woodward, Vt.; S. M. Bemis, La.

Resolved, That the secretary of the Association be authorized to fill up all vacancies in the committee from the States and Territories.

Also, that Dr. A. N. Bell, N. Y., be president, and Dr. A. B. Stuart, Wis., secretary.

Committee on Necrology—Chairman, Dr. A. Sager, Ann Arbor, Mich., and committee remain same as last year, excepting Dr. Alonzo Garcelon, of Maine, in place of Dr. McRuer, deceased; Dr. W. McCabe, Kansas; J. W. H. Baker, Iowa; J. H. Wheeler, N. H.; Dr. Milligan, Minn.; W. H. Chambers, Ill.; G. Sutton, Ind.; A. J. Lands, Ga.; A. B. Vaughn, Miss.; George Mitchell, Ohio; J. J. Woodward, U. S. A.; N. M. Dodson, Wis.; L. P. Yandell, Sen., Ky.

Judicial Council—Three years—Dr. W. Brodie, Mich.; N. S. Davis, Ill.; E. L. Howard, Md.; Wm. O. Baldwin, Ala.; H. W. Dean, N. Y.; J. P. Logan, Ga.

Two years—L. S. Joyner, Va.; R. N. Todd, Ind.; H. F. Askew, Del.; J. E. Morgan, D. C.; Daniel Little, N. J.; S. M. Benham, Penn.; A. Dunlap, Conn.

One year—Dr. J. K. Bartlett, Wis.; Powell, Ill.; Gale, Ky.; Moses, Mo.; Hughes, Iowa; Bemis, La.; Cheever, Mass.

Dr. R. R. Storer was appointed chairman of a com-

mittee to report on American as compared with foreign water cures.

The report was adopted.

On motion, the Association adjourned.

LECTURE ON CANCER.

In the evening the Toner Lecture was delivered at Masonic Hall, by Dr. J. J. Woodward, United States Army, on cancer and cancerous growths, in which he traced the history of the researches and discoveries in this branch of medical and surgical science, and the various opinions which have been entertained by the great authorities upon the subject during the past two centuries, and then passed on to give an outline of the structure and nature of such formation.

In giving his own experience, he expressed his dissent from some of the principles and opinions held by many prominent writers on cancerous growths, and in a most elaborate and erudite discourse, illustrated by photographs of sections of cancers which had come under his own treatment, proceeded to support his views.

The illustrations were by photo-micrographs, magnified to from two thousand to five thousand times the natural size of the objects, exhibited by means of A. S. Aloe's admirable apparatus.

FOURTH DAY.

President called the Association to order at 10 A. M.

On motion of Dr. Davis, the vote by which the report of the Committee on Nominations on State Board of Health was adopted, was reconsidered.

On motion of Dr. Davis, the whole subject was recommended to the Committee on Nominations.

On motion, Dr. W. F. Peck, of Iowa, was appointed a special committee to report on railroad injuries, and Dr. P. J. Farnsworth, of Iowa, on the therapeutics of ammonia.

Dr. A. S. Maxwell, of Iowa, offered the following amendment to the Constitution :

“Resolved, That in view of the many and important duties imposed upon the Nominating Committee of this Association by resolutions adopted at this session, the Medical Society of each State and territory that elects delegates be requested, when selecting delegates, to nominate one member of such delegation as their member of the Nominating Committee, and also designate the mode of filling vacancies.”

Laid over.

The following amendment was offered by Dr. A. M. Pollock, of Pennsylvania, and laid over until the next meeting :

“Resolved, That in article six of the Constitution, line four, the word ‘five’ be stricken out and the word ‘ten’ be inserted. It will then read, ‘funds may be obtained by an equal assessment of not more than \$10 annually on each of the delegates and permanent members,’ etc. And in By-Laws, article five, line one, strike out the word ‘five’ and insert the word ‘ten,’ when it will read, ‘the sum of \$10 shall be assessed annually upon each delegate to the sessions of the Association, as well as upon each of its permanent members,’ etc.”

A resolution on intemperance was presented by Dr. H. H. Middlekamp, of Warrenton, Missouri, but it was tabled.

A resolution on liquors and patent medicines, submitted by Dr. Matchet, of Texas, was also tabled.

Dr. S. S. Bond, of Washington, D. C., who was suspended last year as in arrears in his local Society, was reinstated by a vote of the Association, he being restored to membership in his local Society.

Dr. Davis then read the following majority report on ethics :

“The majority of the Committee on Ethics, in respect to the protest of the St. Louis Medical Society against the registration of Dr. Adam Hammer, of St. Louis, as a permanent member of this Association, respectfully reports :

“That, after due investigation and the hearing of both parties, it appears that about a year since Dr. Adam Hammer was regularly arraigned and tried by the St.

Louis Medical Society, of which he was a member, on the charge of violating the code of ethics. After an apparently full investigation, he was declared guilty of the charges, and at a subsequent meeting he was suspended from membership for five years and until reinstated by a vote of the Society. From this decision of the Society the suspended member appealed to a civil court for legal process to compel the Society to reinstate him. The judge of the court decided that the charter of the Society gave it no authority to take cognizance of any personal assaults or controversies between its members, and issued a peremptory mandamus requiring the Society to rescind its vote suspending Dr. Hammer, and to restore him to his rights of membership. Under this compulsory legal restoration to membership in the St. Louis Medical Society, Dr. Hammer claims the right to be registered as a permanent member at this meeting of the Association. After due consideration it appears clear to a majority of the members of your committee that the mandamus of the Circuit Court has no other effect than simply to prevent the St. Louis Medical Society from enforcing any penalty against one of its convicted members, and does not in any degree affect the fact that he still stands convicted of having violated an important provision in the code of ethics. The Constitution of this Association, in the clause defining who shall be permanent members, states, 'that permanent members shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote, and shall continue such so long as they remain in good standing in the body from which they were sent as delegates.' Inasmuch as Dr. Adam Hammer still stands convicted of a violation of the code of ethics by the St. Louis Medical Society, and said Society is restrained from inflicting the penalty it has adjudged proper for the offense solely by the interference of a civil court, it cannot be claimed that he remains in good standing in that Society. Therefore your committee is of the opinion that he ought not to be received as a permanent member of this Association at its present meeting.

"D. W. YANDELL,

"N. S. DAVIS,

"H. F. ASKEW."

MINORITY REPORT.

After the reading of this report, the minority report was presented, as follows:

"The undersigned reluctantly dissents from the report of the majority of the Committee on Ethics, in the case of Dr. Hammer, on the following grounds:

"The only question before the committee is, shall Dr. Hammer be permitted to register as a permanent member? The Constitution of this Association says: 'The permanent members shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote, and shall continue such so long as they remain in good standing in the body from which they were sent as delegates, and comply with the requirements of the by-laws of the Association.'

"It appears that Dr. Hammer is still a member of the St. Louis Medical Society, with all the rights and privileges of any other member of that body. The undersigned holds that the committee have no right to examine the case beyond this record, and therefore move that the name of Dr. Hammer be ordered entered as a permanent member of this Association.

[Signed,]

E. LOYD HOWARD."

The majority report was adopted by a large majority.

The sections on psychology, etc., practice of medicine, etc., surgery, etc., materia medica, etc., and meteorology, etc., reported their minutes, which were, on motion, referred to the Committee on Publication.

On motion of Dr. Atkinson, inasmuch as Dr. Cheever was not a member of the Association, his name was removed from the list of the Judicial Council, and that of Dr. J. R. Bronson, of Massachusetts, substituted.

Dr. J. R. Bronson submitted the following:

The American Medical Association, now about to adjourn, would prove derelict in duty and appreciation did it not honor itself by an acknowledgment of the obligations under which it has been placed by the profession, the Committee of Arrangements, the press, Colonel Morrison, Henry Shaw, Esq., and other citizens of St. Louis; to Dr. Woodward, U. S. A., for the elaborate

scientific dissertation delivered last evening, under the auspices of the Toner fund, by Dr. Toner, of the District of Columbia, for initiating a lecture course of scientific character; and last, but not least, to the President and officers of this Association for the dignified character and impartial manner in which they have performed the functions of their offices; therefore,

Resolved, That the thanks of this Association be extended to each and all of the aforesaid, and this vote be placed upon our minutes.

Adopted.

Dr. Frederick Horner, Jr., U. S. N., after a short, but earnest, speech in favor of the cause of temperance, offered the following resolutions:

ALCOHOLIC STIMULANTS.

Resolved, That, in view of the alarming prevalence and ill effects of intemperance, with which none are so familiar as members of the medical profession, and which have called forth from eminent English physicians the voice of warning to the people of Great Britain concerning the use of alcoholic beverages, we, the undersigned members of the medical profession of the United States, unite in the declaration that we believe that alcohol should be classed with other powerful drugs; that when prescribed medicinally, it should be done with conscientious caution and a sense of great responsibility.

Resolved, We are of the opinion that the use of alcoholic liquors as a beverage, is productive of a large amount of physical and mental diseases; that it entails diseased appetites and enfeebled constitutions upon offspring, and that it is the cause of a large percentage of the crime and pauperism of our large cities and country.

Resolved, That we would welcome any change in public sentiment that would confine the use of intoxicating liquors to the uses of science, art and medicine.

On motion of Dr. Spottswood, of Virginia, they were referred to the Committee on State Medicine and Public Hygiene.

The Secretary announced that Dr. E. W. Gray, of

Bloomington, Illinois, would read a paper next year on the relation of Physiology to the Practice of Medicine.

The following final report was submitted by the Committee on Nominations, through Dr. Garcelon, of Maine, and adopted:

The committee recommend that the nomination of the committee from the thirteen original States be deferred to the next annual meeting of the Association. The committee request the convention to reconsider its action in the appointment of Dr. Myers, of Indiana, as a member of the Committee on Hygiene and State Medicine, and that the name of Dr. James F. Hibbard, of Indiana, be substituted. The committee also nominated Dr. W. O. Smith, of Newport, Kentucky, as chairman of a Special Committee on Puerperal Fever.

On motion of Dr. Yandell, Kentucky, the selection of Chairman and Secretary of the Judicial Council was left to that body.

Dr. Davis then moved an adjournment.

The Association then adjourned to meet on the first Tuesday in June, 1874, at Detroit, Michigan.—*Medical and Surgical Reporter*.

Reviews.

HANDBOOK FOR THE PHYSIOLOGICAL LABORATORY, by E. Klein, M. D., Assistant Prof. in the Pathological Laboratory of the Brown Institute, London, etc.; J. Brown Sanderson, M. D., F. R. S., Prof. Practical Physiology in University College, London; Michael Foster, M. D., F. R. S., and T. Lauder Burton, M. D., D. Sc., Lecturer on Materia Medica in the Medical College of St. Bartholomew's Hospital, London. Edited by J. Burdon-Sanderson. In two volumes, with 133 plates, containing 353 illustrations. Vol. 1, text; Vol. 2, plates. Lindsay & Blakiston, Philadelphia, 1873; Cathcart & Clelund, Indianapolis.

This is an admirable work. The editor modestly says "it is intended for beginners," "a book of methods, not a compendium of the science of physiology," to be used

Copied

“rather in the laboratory than in the study.” But a description of what it treats of will give but little idea of its usefulness. Instead of giving a mere description of physiological structure and function, it describes the method of demonstration in the laboratory, chemical, physical and microscopical, etc. As Holmes’ Surgery is the production of several, each contributing to the formation of a whole, and Stricker’s Histology on the same plan, so here, we have the various subjects treated by different individuals, and as in the works mentioned, the method thus adopted has proved a success. So here we have, as we think, a lucid and exhaustive examination of experimental and practical physiology; the numerous plates vie in point of execution with any we have seen. As an example of what is found, we give the following from Dr. Burdon-Sanderson’s article on “Animal Heat:”

“DIRECT ESTIMATION OF THE QUANTITY OF HEAT PRODUCED BY AN ANIMAL IN A GIVEN TIME.—The second method (to which alone the term Calorimetry is strictly applicable), consists in the direct estimation of the quantity of heat (heat units) given off by an animal in a given time. The subject of observation is placed for a measured period in a chamber, which is so constructed that while it is continuously supplied with air for respiration, it is surrounded on all sides by a mass of water, the weight and temperature of which are known. The construction of such a chamber (Calorimeter) can be readily understood from the diagram, fig. 265.

“A, is a box of zinc plate, in which the animal is placed, the size varying according to the animal it is intended to receive. If for rabbit or small dog, it is $15\frac{1}{2}$ inches long by 12 inches wide, and 13 inches high. It possesses two openings, one of which is in the lid and communicates with a large gasometer, into which air is constantly injected by a Bunsen’s water air-pump. The other is in one end, and opens into an exit tube (D), which after surrounding the box twice, terminates in a

flexible connector, by which the air which has passed through the chamber escapes. The section of this tube, the purpose of which is to secure the condensation of the aqueous vapor discharged from the lungs and skin, is oblong and rectangular; in order that it may present to the water by which it is surrounded as large a surface as possible. The inner box (A) is surrounded by another which is of such dimensions that the external surface of the former is separated from the internal surface of the latter by a space of an inch and a half in every direction. The space contains water the weight of which can be readily known. The inner box can be fixed into its place by a simple mechanical arrangement. The water-chamber (B) is contained in a wooden case (C), which however is so large that a considerable space intervenes, which is closely packed with tow, the purpose of which is to prevent loss or gain of heat by radiation or conduction, and thus to render the temperature of the interior of the apparatus entirely independent of that of the surrounding media. For the same reason the external surface of the water-chamber is of bright tinplate. The interior of the water-chamber is japanned. The zinc inner chamber for the reception of the animal is left as it is.

“The temperature of the animal having been measured by passing a thermometer an inch and a half into the rectum, it is placed in the box, the exit tube of which has been previously brought into communication with an aspirator. The lid is then rapidly but carefully closed with putty, and the whole placed without loss of time in the water-chamber. The water-chamber is then closed and immediately covered with a layer of tow. In its lid there are two oblong openings for the introduction of stirrers.* The water having been agitated immedi-

*I have lately adopted a better method of agitation, consisting in the injection of air into the space below the chamber A. The construction is such that the whole of the air so used finds its way into the chamber.

ately after the introduction of the box containing the animal, a thermometer is introduced by one of the openings already mentioned, which after three minutes is read. The time having been noted, the apparatus is left to itself for fifteen minutes, half an hour, or an hour, and the temperature is again observed after agitation of the water. The results having been noted, the animal is withdrawn with as little delay as possible from the case containing it, and the thermometer is introduced into the rectum to the same distance as before, and read after the same interval of time.

"In this way obviously four readings are obtained—those of the animal and of the calorimeter at the beginning and end of the given period. To interpret them we must take into account, not only the relative weights of the animal and of the calorimeter, but their several capacities for heat. In the case in which the temperature of the animal remains the same, the amount of production being equal to that of discharge, all that is required is to know how much heat has been communicated during the period of observation to the calorimeter. In the opposite case we must, in order to judge of the quantity of heat produced, add to or deduct from the quantity communicated the quantity it has borrowed or given off from its own body. If the animal loses heat while it is in the chamber, the heat it gives off is only partially generated, the remainder being abstracted from its own body. If it gains, the quantity of heat generated is only partially given off; the remainder is added to its own temperature. To make this deduction or addition, as the case may be, two questions must be answered.

1. "How much heat does the calorimeter require in order that its temperature may be raised one degree?

2. "How much does the body of the animal require for the same purpose?

"In both cases the quantity required is equal to the

specific heat multiplied by the weight. The *mean* specific heat of the calorimeter is obtained by adding together the products of the specific heat and weight of the parts of which it is composed—*i. e.*, the iron case and the water.

“Supposing *e. g.*, the iron to weigh 3800 grammes and the water 8600 grammes, the specific heat of iron being 0.114, the product in question is for the iron casing 419.5, while that for the water is 8600.0. Consequently 9019.5 gramme-units of heat are required to raise the whole one degree of temperature. Applying the same method to the animal body, the specific gramme-units as the quantity to be added or deducted for each gramme of weight and degree of variation of temperature.

“The whole process will be readily understood from an example, the weight of the calorimeter being that given above.

“Temperature of calorimeter—at beginning 39°.2 C., at end 38°.3 C.

“Weight of animal, 3200 grammes.

“From these results we obtain :—

“1. Units of heat communicated to the calorimeter
 $9019.5 \times 1.6 = 14431.$

“2. Units of heat borrowed from the body of the animal
 $3200 \times 0.83 \times 0.9 = 2390.$

“Result 14431 — 2390 = 12041.

“That is to say, the animal, during the period of observation gave off 12,041 gramme units of heat.”

ANNOUNCEMENT OF SESSION 1873-4 OF MEDICAL DEPARTMENT OF UNIVERSITY of VIRGINIA. Number of Students 55.

CLINICAL LECTURE on various important Diseases, being a collection of Clinical Lectures delivered in the medical wards of Mercy Hospital, Chicago, by Nathan S. Davis, A. M., M. D., Professor of Principles and Practice of Medical and Clinical Medicine in Chicago Medical College. Edited by Frank H. Davis, M. D. J. J. Spaulding & Co., Chicago, Ill.

These cases embrace examples of various forms of fever, scarlitina and rubeola, affections of respiratory

organs, of the alimentary canal, diseases of females and children, etc., etc. Something that would benefit every practitioner by reading.

CIVIL MAL-PRACTICE—A report presented to the Military Tract Medical Society at its fifteenth semi-annual meeting, January 14th, 1872. By M. A. McClelland, M. D. Chicago: W. B. Cook & Co., Publishers, No. 113 and 115 State street, 1873.

The Doctor, "being appointed as one of the Committee on Surgery" to prepare a report, brings forth the above as a contribution to Medico-Legal Science and Literature, a subject heretofore too much ignored, and as a consequence upon which medical men lack information. We see that he recognized the important fact of shortening in cases of fracture, as being found in more cases than is often supposed, an unavoidable occurrence. The text is fully illustrated and sustained by report of cases. We recommend all who wish additional information, or have need of a work of reference on the subject discussed, to obtain this little work.

THE MINERAL SPRINGS OF THE UNITED STATES AND CANADA, with Analysis and Notes on the prominent spas of Europe, and a list of sea-side resorts, by Geo. E. Nolton, M. D., Lecturer on Materia Medica, in the Miami Medical College, Cincinnati, etc. D. Appleton & Co., New York; Cathcart & Cleland, Indianapolis.

This work is complete, and in our judgment is to be preferred in some respects to any other we have upon the same subject. True we have Moorman's on Mineral Springs, which is without doubt a valuable contribution to medical literature, but we think we speak impartially when we say that the present is, as regards arrangement, etc., superior to the former.

REPORT of the Board of Commissioners Third Cincinnati Industrial Exposition, 1872. Rules and Premium List Cincinnati Exposition, 1873.

When in Cincinnati, a few days since, we caught a glimpse of the Exposition buildings, and are glad to see from the present report that the undertaking has been a

success. So much so, that a fourth will be held this year, commencing September 3d, and continuing until October 4th. Valuable hints can be obtained by the Commissioners of our own Exposition as to how to conduct it, etc., by a perusal of these reports.

ADDRESS of Thos. M. Logan, M. D., President of the American Medical Association, delivered in St. Louis, Mo., May 6, 1873.

ANNUAL ADDRESS of the retiring President, M. W. Dawson, M. D., Cincinnati, 1872.

Prof. Dawson, in this address, gives a synopsis of the advance made in medicine and medical teaching—contrasting the past with the present, greatly to the advantage of the latter. What statistics he has are not dull, nor is his praise fulsome.

Editorial.

The Ohio State Medical Society convened at Columbus, Ohio, Tuesday, June 10, 1873. Being a delegate thereto from the Indiana State Medical Society, and having never met with them before, we threw up business and with our friends, Drs. R. N. Todd and T. B. Harvey, made the proposed visit. Although we were not present until noon of the second day, we found a goodly number of Ohio's professional men assembled in the City Hall. Several good papers were read and very ably discussed. We hope to see these papers, and the discussion thereon, appear in a neat volume of Transactions. We hope that our friends of Ohio will not be intimidated by some innocent though frothy criticism, to such a degree that modest merit, or the out springing of head work, shall be cast aside and have no place of honor.

Thursday evening the Society was entertained at the Asylum of the Deaf and Dumb with some music and

recitation of poems, by the students of the Institution. After which a collation was spread in the rooms below. The whole entertainment was a credit to those who conducted it, and a mark of their appreciation of the medical profession.

After leaving Columbus, we touched at Cincinnati, and there met many of the physicians of that city. Prof. Dawson, of the Ohio School of Medicine, whom many of the physicians of the North-West know personally, and whose name is a national one, laid us under many obligations by his kind attention, as did also Drs. Conner, Graham, Miner, and others. Dr. E. B. Stevens, the "veteran" editor of the "old reliable" Journal, the *Lancet and Observer*, seems to bear his labors lightly.

We regret that time did not permit us to call upon all the physicians whose names and works are so familiar to us.

In the great work of Medical Education, the Colleges of Cincinnati stand second to none in the West in their earnest endeavors to work up to a high standard, and their well earned reputation will without doubt be sustained by the present corps of Professors.

WHILE in attendance upon the Ohio State Medical Society, we learned, what indeed we heard vague hints of before, that there was a great amount of ignorance, even among medical men, concerning the proper status of that hybrid concern, the "Surgical Institute," of this city, some mistaking it for a legitimate institution.

By the by, we have been often annoyed by ignorant outsiders mistaking this same advertising affair, the Surgical Institute, for the Indiana Medical College. It may be that some who are intelligent might fall into the same error. We beg leave to say that the latter institution does not claim the improbable things boasted of by the former, and does not desire to be confounded therewith.

WE call attention to the fact that a committee was appointed at the late session of the State Medical Society to report upon the "History of Medicine in the State of Indiana." The composition of said committee will be seen by referring to the proceedings of said Society, published in the June number. We desire that not only the committee should work, but all other physicians. Therefore we hope and call upon every physician that they will supply some member of said committee with all facts in their possession relating to such history. This is an important matter, and one that all should take an interest in. Please do not delay, but attend to it at once, so that a full report can be obtained during this year. The scope of the information we desire embraces the progress of the science and practice of medicine, brief biographical sketches of physicians, history of the formation and founding (with officers, etc.) of societies throughout the State, and from the earliest period to the present.

For convenience of reference, we append the names of the committee: Drs. Stevens, Lomax, Casselberry, Ayres, Kersey, Sutton and Beckner.

WE call attention to the advertisement of Lilly & Phelan, in the proper place. These gentlemen have successfully established themselves in Evansville, and have shown to all who have tested the fact that they make reliable medicines. Some of them are better than any we have used, and all are as good. While we would use any good brand of medicine, we feel it a duty to encourage home manufactures, especially in medicines.

[Communication.]

TO OUR INDIANA FRIENDS.

A New York City physician writes as follows :

“APRIL 22, 1873.

“MESSRS. LILLY & PHELAN, Evansville, Ind.

“*Gentlemen* :—I am surprised, as I had not anticipated as much, at the efficacy, and therefore the excellence and superiority of your preparation, ‘Aromatic Liquid Pepsin,’ as I had found the dry pepsins, to contribute to, if not induce Amylaceous Dyspepsia. R. K. B.

Another writes us that he has carefully watched its effects for several months, being desirous of obtaining better results than had from alcoholic pepsins (wines and elixirs) and dry pepsin, and pronounces our “Aromatic Liquid Pepsin” of superior efficacy in all cases of indigestion depending upon debility of the stomach, or deficiency or defect of the gastric juice ; and that it can be administered with great advantage in chronic inflammation of the mucous membrane, when caused by *defective assimilation*, and in cases where the constitution has been weakened or undermined by some chronic disease, such as *phthisis-pulmonalis*, inflamed or ulcerated throat and bowels, and in chronic diarrhœa, and adds : “The taste of pepsin is so disguised that it is pleasant to take, and adapted to children as well as adults. M. J. B.”

We guarantee this preparation to keep well in any climate, hot or cold. It is on sale by all leading druggists, who can now fill your prescription. A trial will secure for us a new friend for Aromatic Liquid Pepsin.

Respectfully yours,

LILLY & PHELAN,

Evansville, Ind.

INDIANA JOURNAL OF MEDICINE

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Original Communications.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

BY HENRY G. TODD, M. D., DANVILLE, IND.

Extract from a paper read before the Hendricks County Medical Society, June 3, 1873, and published by request of the Society.

* * Whatever may be the nature of the poison operating to produce Epidemic Cerebro-spinal Meningitis, it appears that its action is mainly upon the vasso-motor nerves of the sympathetic ganglia, distributed to the upper part of the spinal column, and to the head, this derangement being either functional or structural according to the suddenness and severity of the attack, the immediate effect of which is, congestion of the blood vessels, and consequent compression and fullness in the parts, with increase of temperature, secretion, and sensation, dilatation of the pupils, want of consciousness, and such other symptoms as result from compression of the brain and cord. In the most violent cases, never complicated with inflammation, there being no time, nor sufficient nervous irritability for its develop-

ment; and even in the less violent and more protracted cases, inflammation is not a uniform attendant, as attested by the post mortem examinations referred to in the preceeding pages. How far the following physiological experiments may tend to explain the conditions present in spotted fever, I leave for the consideration of the reader, to my mind they are important. In a series of experiments in vivisection, instituted by Bernard in 1851, he noticed that a section of the servical sympathetic nerve in animals, was always followed by an afflux of blood to the parts of the head to which its fibers were distributed, and was attended with an increase of temperature, secretion, and sensation. Brown Sequard, on repeating these experiments years afterwards, confirmed the statement of Bernard, and also found that a section of the lateral columns of the spinal cord was followed by the same results, upon the parts to which their fibers were distributed. The results of these sections may be summed up as follows: 1st. Dilatation of the blood vessels. 2d. Afflux of blood to the parts. 3d. Increase of temperature and secretion, and 4th. Hyperesthesia. Brown Sequard attributed those results to paralysis, produced by the section, and if this view was correct, he thought the congestion ought to be relieved by galvanism, which supposition was amply verified by experiment, the congestion and accompanying symptoms yielding promptly to its action, and the vessels contracting under its stimulus to their normal size. In view of these facts, I think you will agree with me in the opinion that they go very far in explaining the conditions we meet with in spotted fever. The operating poison spends its force very much upon the brain, sympathetic and spinal nerves, and their meninges, and to a greater or less degree paralysis is produced, functional only, to be sure, in many cases, and therefore, complete restoration may be hoped for, but in too many cases, organic changes are the result, and the paralysis

is permanent. Functional or organic paralysis of these nerves, or the lateral column of the spinal cord, would correspond in their results with a section of the same, of course in proportion to the amount of injury sustained by them. 1st. Dilatation or a loss of tone in the vascular coats, which necessarily implies the second condition, afflux of blood or congestion of the vessels, which is especially a characteristic of this disease. 2d. Increase of temperature and secretion, are conditions equally apparent, the secretion being so abundant as to fill up the sub-arch noid spaces, the ventricles of the brain and the interspaces of the cord and membranes. And 3d. We often find the hyperthesia so great that the patient is crazed with a shudder, on the approach of any one to the bed side.

For the last three years I have used the calabar bean with a view to diminishing this congestion, and, I think, with such results as I could not obtain from any other remedy in use, but without feeling clear as to the conditions under which the congestion existed, nor has Prof. Davis, of Chicago, enlightened us on this particular point in an article on this subject published last year, though he speaks of the engorgement of the blood vessels, and uses the calabar bean, ergot, et cetera, to contract the caliber of the vessels, and thereby relieve the congestion; yet he has not stated whether in his opinion, this congestion was the result of exalted or depressed nervous action, or what were the conditions under which it existed. But the experiments of Bernard and Brown Sequard seem to be exactly in point, and I think a careful comparison of these experiments, with the symptoms occurring in spotted fever, will result in the conviction that the condition is one of paralysis, and with this view of the subject, there is no remedy that would compare, theoretically, with galvanism, or electricity in some of its modified forms, either for promptness or potency in restoring normal action.

And my apology for presenting these views before they have been practically tested, is, that their value, if they have any, may be verified by the profession, and with the hope that the sufferings from a disease now prevailing, and which is so terrible may be mitigated.

Perhaps it may be proper to suggest, that in the use of electricity, the positive pole be applied to the dorsal or cervical portion of the spine, while the negative is moved about the forehead and temples, that the current be moderate but continued for several hours if need be.

N. B.—Since writing the above, I have had the opportunity of using electricity in a severe case of cerebro-spinal meningitis, in which my most sanguine expectations were fully realized, the patient is recovering, but I am sorry to say that I am not authorized to report the case.

REPORT OF CASE.

JOSEPH EASTMAN, M. D., BROWNSBURG, IND.

Was asked to see Mrs. O., in December, 1872, supposed to be suffering from prolapsus, for which she was wearing a "Babcock uterine supporter." I learned that some eleven months previous to my visit, she had an abortion at the second month of gestation, she lost "much blood" at the time; at the end of a month she attempted to go about her work; and feeling a weight in the pelvis returned to bed, she sent for her physician, who diagnosed a bad case of *prolapsus uteri*; he informed the husband that the case was perfectly curable, and that a uterine support was the one thing needful; the husband at once procured it and gave it to the doctor, who applied the same to the uterus; the swollen and congested cervix could not enter the cup of the instrument, as I presumed from what followed. At first she felt some

relief from the instrument; she soon found matters getting worse, her nervous system began to give way, she became very excitable, and rapidly lost flesh, and when I saw her she was bordering on extreme debility. She had continued on however with heroic zeal, being encouraged by her physician that the instrument would cure her.

When I saw the case it presented the following symptoms: Tongue coated, indicating partial congestion, no appetite, bowels costive, nerves in such a condition that the least noise gave palpitation of the heart, for which she became a great consumer of valerian. What was peculiar and of special interest to me, was the entire absence of pains or pelvic symptoms of any kind, except a discharge of pus from the vagina, which had received the dignified name of "the whites," it amounted to about a teacupful in the twenty-four hours. I removed support, introduced the index finger, it passed readily within the cervix, and by placing the other hand upon the fundus I could have passed the finger entirely within the body of the uterus, I could detect a division between the anterior and posterior lips of the cervix, which I found on introduction of a coscœ speculum to be the result of the cervix resting on the edge of the instrument rather than in the cup. This lesion amounted to a cutting of the cervix, laterally up to the attachment of the vagina; the support had cut or worn its way not less than an inch and a fourth, leaving little or no distance from the bottom of the cut to the os interuum. I at first decided to remove the elongated double cervix, but concluded to try a more safe means, as from the extremely congested condition I feared hemorrhage, by local abstraction of blood, and the application of Churchill's tinct. of iodine the rent has healed up and the patient is in reasonable health, doing her own work.

Query—Has Babcock's supporter any right to be paraded in a medical journal plates and this assertion, "Dr.

L. A. Babcock's Silver Uterine Supporter, for the cure of Prolapsus, Retroversion, and Anteversion, *warranted a sure cure*, price \$25.00."

The case of which I have spoken was the abuse and not the discriminate use of the instrument. Yet why he or his instrument, after being advertised in the way spoken of, can be countenanced I can not imagine, especially if we regard the code of ethics of the American Medical Association.

Query number 2—I noticed on the card of a doctor not long since, "Consulting Gynecologist." Is this admissible?

HEALTH BOARDS AND STATISTICS.

BY W. WAND, M. D., INDIANAPOLIS.

MR. EDITOR—I desire, through the Journal, to call the attention of the profession throughout the State to what appears to me, if properly managed, would prove a valuable auxiliary to the State Medical Society, in collecting the data of disease in the State. The effort to obtain a knowledge of the prevailing disease in some counties has so far proved abortive and unsatisfactory, and perhaps the plan I propose would not be more fruitful, while in some localities it would stimulate and induce a healthy action, which would carry out the design of the State Society.

My plan is to organize a Board of Health in every incorporated town in the State; if a town is not incorporated, but has over three thousand inhabitants, then proceed to incorporate according to an act approved March 14, 1867. This can easily be done, and when done the profession rightfully and by authority becomes the guardians and statisticians of public health.

My experience as a member of the Board of Health of this city, convinces me that we can obtain more reli-

able information concerning the diseases and mortality of our State than by any other method; by such organizations, gentlemen living in remote districts can add much to the meager medical and mortuary statistics of the State.

The first medical men of the profession throughout the country are moving in this matter, and Indiana doctors, possessing the intelligence they do, should take a place in the front rank in all that pertains to public health and disease.

The blanks used by the Board of Health of this city, will be furnished to all who may apply.

Proceedings of Societies.

BRAINARD MEDICAL SOCIETY.

The Society met in the Christian church, in Winamac, on Thursday, June 12, 1873.

Members present, James Thomas, F. B. Thomas, A. R. Thompson, W. T. Cleland, G. W. Safe, Leroy Rogers, Wm. Kelsey, D. F. Moss, H. E. Pattison, W. H. Thompson, G. W. Thompson, J. B. Washburn, T. I. Loring, and J. W. C. Eaton.

The President being absent, the Society was called to order by the Secretary, and the President elect, Dr. I. B. Washburn, introduced.

The President, before taking the chair, read his inaugural address, which elicited the closest attention from all present. It was ordered to be recorded in the journal of the Society, and a copy requested for publication in the Winamac and Logansport papers.

Dr. Kelsey presented the name of T. J. Loring, of Monterey, as a candidate for membership. This applica-

tion was referred to the censors, who reported favorable, and he was admitted.

The Secretary reported that according to a resolution adopted at the last meeting, he had notified all members in arrears for dues, for two or more years, that unless the same be paid at or before this meeting, their names would be stricken from the roll of members, and all had paid their dues except C. G. Hartman, of Winamac; D. H. Thornton, of Medaryville; J. R. Sinclair, of San Pierre; and J. G. Winegarden, of Francisville.

The name of said delinquents were ordered to be stricken from the roll of members.

Dr. J. W. C. Eaton, of Pulaska, read a paper on the pathology of typhoid fever, or the typhoid state.

The term, typhoid fever, was objected to as applied to a distinct disease or phenomina, as this peculiar condition, known as the typhoid state or condition, might be present in connection with many diseases very widely different in their character, as, for instance, pneumonia, erysipelus, scarlatina, dysentery, etc. If this condition attends periodical or remittent fever, we have what is usually known as typho-malarial fever, and if with pneumonia, typhoid pneumonia; and if present alone, that is to say not in connection with the cause of any other disease, we then have what is usually known as typhoid or enteric fever.

But that the pathological condition was precisely alike, whether the cause given rise to the typhoid condition be operating in connection with the cause of other diseases or alone. This condition is always characterized by a peculiar group of symptoms readily recognized and always present.

In all febrile complaints the disintegration or combustion of the tissues is much augmented beyond a healthy standard, and the products of this increased metamorphosis are chiefly eliminated by the kidneys, and appear in the urine. As long as the kidneys are equal to the

increased work forced upon them, the blood is properly dipurated and the typhoid state warded off. But if, from the large amount of effete matter to be eliminated, or from any other cause, the kidneys are not equal to the task, the blood becomes poisoned, and either convulsions or the typhoid state supervenes.

The indications for treatment are to use means to further the elimination of effete matter or the products of tissue metamorphosis through the kidneys, being cautious to avoid anything that can irritate or interfere with their functions.

The history of a case was given, where the writer was called in consultation to a young lady suffering from a relapse of typhoid fever, so that she was worse than at any time previously. Had had convulsions followed by coma for several hours. All the prominent symptoms of typhoid fever were present in a marked degree. The quantity of urine secreted for several days previously was lessened, to which cause was ascribed the relapse. The following was prescribed: R. Acetate of potash, \bar{z} ss; fl. ext. buchu, fl. 3j; spts. nitre; camphor water, aa. \bar{z} if. Sig. Tablespoonful every four hours.

The condition of the patient was improved by next morning; no symptoms of convulsions noticed after the urinary secretion become free. The patient recovered in the usual time.

The disease is considered self limited, and no treatment can materially shorten its duration. Means ought to be used to sustain the vitality until all the danger is passed.

Dr. Cleland thought the views expressed in the paper, as to the pathology of the typhoid condition, correct, as they accorded perfectly with his observation and experience. Typhoid fever is a self limited disease and can not be broken. Thinks that in typho-malarial fever, where the malarial influence is prevailing strongly, quinine might be given with benefit, so as to arrest the

malarial complication, but that the typhoid condition must run its course.

He is certain that the cause, giving rise to the typhoid condition, is very similar to that producing puerperal fever, and cautions physicians of the importance of warning their lady patients on no account to neglect an early attention to any derangement of the urinary organs previous to confinement, as he had seen many cases of puerperal diseases which he was very certain was caused by this neglect.

Dr. Kelsey thought there was a great difference between typho-malarial fever and enteric or typhoid fever, and considered the pathology of the two as different. Stated he could arrest cases of typho-malarial fever with quinine. He reported a case of a man with typhoid fever, who had been in a profound stupor for a considerable length of time, speedily relieved by a free action of the kidneys.

Dr. Rogers thought the name of typhoid fever of immense benefit to several physicians of his acquaintance, as it was common for them to call all bad cases of any kind of fever typhoid, and he had known many cases made to partake of the nature of typhoid from an injudicious use of podophylin and other drastic cathartics, as he believed, for gain by dishonest practitioners.

He thought that typho-malarial fever might be arrested with quinine, and recommended for this purpose doses of eight to ten grains every three or four hours, until three or four doses were given. Stated that the average duration of this disease with this treatment would be about nine days.

Dr. Pattison thought enteric fever an independent condition, and should not be confounded with typho-malarial fever. That while typhoid or enteric fever was very rarely met with, typho-malarial fever was of frequent occurrence, that the one was caused by decomposed animal matter, and the other by malaria.

Dr. Eaton could not see why the cause producing the typhoid condition, could not operate alone and produce the typhoid or enteric fever, as all admitted that it could operate in connection with the cause of other diseases, as periodical fever, dysentery, scarlatina, etc., and that all could readily recognize its presence in all these conditions, that its pathology *must* be alike in whatever form or manner it appeared. That typhoid or enteric fever differed from typho-malarial fever only in this; that in one the cause was operating independently and alone, and in the other was modified by the cause of malarial fever.

He had within a few months witnessed a severe epidemic typho-malarial fever in Howard county, where the quinine treatment was very thoroughly tried, he had seen it given at all stages and in various sized doses, but never with beneficial results, but on the contrary had known positive injury and even death produced by its use.

Dr. Washburn thought that the description of the pathology of the typhoid state in the essay was correct, and in accordance with well established views of the profession.

He objected to the term typhoid fever as usually applied, as this term meant simply resembling typhus, the lowest type of fever. He did not believe typho-malarial fever could be arrested with anti-periodics, but thought that where there were distinct intermissions, quinine might be given with advantage. Relies mainly on the use of muriatic acid, stimulants, and nourishment. Thinks carbonate of ammonia and camphor much the best stimulants, but if alcoholic stimulants be given in sufficiently large doses they may be of advantage, if administered as usually prescribed, in spoonful doses, they are worse than useless, they should be given a gill at least at a time. Given in this way they would retard the destructive metamorphosis of tissue.

Dr. Kelsey reported a case of purpura, in which there was considerable hemorrhage from different parts of the body. The hemorrhage was controlled with opium and acetate of lead, and the cure completed with quinine, iron, and sulphuric acid.

Dr. Nape reported the case of a gentleman, 78 years old, who, a year ago, was taken with a very severe pain across the regions of the kidneys, each side of the pubus, and across the region of the bladder. There was suppression of urine, which could only be relieved with the catheter, urine bloody, and on standing for a short time solidifies into a pasty mass, resembling jelly, and very adhesive. The patient is very much emaciated and nothing has seemed to benefit him.

Dr. Washburn thought the use of skimmed milk and a raw meat diet might possibly be of benefit.

Dr. Kelsey recommended the following prescription :
R. Muriate of ammonia, ʒij; brom. potassium, ʒss; fl. ext. gelseminum, fl. ʒj; glycerine, fl. ʒiij ss. Sig. A teaspoonful three times a day.

Adjourned to meet in Star City, on Thursday, August 27, 1873.

J. W. C. EATON, Secretary.

NORTH-EASTERN INDIANA MEDICAL ASSOCIATION.

The Society met on Tuesday, June, 3d, 1873, at Kendallville, Dr. Jno. Dancer presiding.

The attendance was very large, over fifty physicians being present.

The minutes of the previous meeting were read and approved.

Dr. Denny, from the committee on the diseases prevalent during the year, within the limits of the Society, stated that he was unable to make a full report at this

meeting. He read a letter from C. A. Whyte, of Wolcottville, giving a short history of the diseases prevalent in that vicinity. The most prominent being cerebro spinal meningitis in the northern part of the county, and puerperal fever in the southern. Both diseases were attended with the usual ravages, and nothing new was elicited concerning treatment.

On motion of J. D. Gilbert, Dr. Denny was requested to make a full and written report at the next meeting, of the diseases prevalent in the counties of the Society. Said report to embody, as far as possible, their treatment.

Dr. Erickson from the committee to revise the Constitution and By-Laws, reported an entirely new Constitution and By-Laws, which, after some discussion, was adopted, and a committee of three appointed, consisting of Drs. Teal, Gilbert and Abell, to superintend the printing of the same.

A motion to rescind the fee bill of the Society was carried, on the ground that the regulation of fees must be determined by each individual member.

The object of this Association was declared to be the promotion of harmony and good fellowship and the elevation of the medical and collateral sciences, not the adoption of fee bills.

Reporting cases was declared in order. Dr. Teal presented a case of spina bifida—child three months old. A week previous he had punctured the tumor, and has since applied moderate pressure. The result of his treatment will be reported to the Society.

Dr. B. S. Woodworth read an essay on the use of the calabar bean in tetanus, illustrated by a case, of which he gave an extended history. The essay elicited considerable discussion, and, on motion, was ordered to be published with the proceedings of the Society.

Dr. Lemon presented a patient suffering from epilepsy. He had treated the case with bromide of potassium.

Dr. H. D. Wood remarked upon the case that he would continue the bromide in large doses for one, two, or three years if necessary.

Dr. B. S. Woodworth stated, after an examination of the case, that he would give the bromide of potassium a reasonable length of time; after the failure of the bromide he knew of no other remedy, except possibly the trephine, that would be likely to prove satisfactory. The case was of some years standing, and could not positively be traced to mechanical injury of the head.

Dr. H. D. Wood reported a case of subacute synovitis of the knee joint. It was now of over two years standing, and had been treated by a number of physicians. Extension, pressure, counter irritants, rest, etc., had been tried in vain. The joint continues very much swollen and painful, and it was believed that extension and moderate pressure, with complete rest, long continued, would finally cure the case. The case was idiopathic, in its origin.

Dr. W. H. Franks presented the following case—female aged 58: Six months ago she fell from a porch twenty inches high. In falling she threw out her hand to grasp a projecting ledge of ice, some feet from the porch. She failed in this, and fell upon the palm of her hand, but struck her shoulder with much force against the ledge of ice. Until four days after the accident she had fair use of her arm, could exercise the usual latitude of motion, though not without pain. At this time pain increased so much that she could no longer be induced to move the arm. The pain still increasing, the doctor was called, fourteen days after the accident. He found the parts much swollen—patient feverish. Was unable to make a satisfactory examination. He prescribed anodynes, fomentations, and enjoined rest, hoping the acute symptoms would subside in a few days, when he could renew the examination. He did not see the case again however until a few days ago. She now suffers

very much pain in the shoulder joint. There is no swelling nor any evidence of displacement. The contour of the shoulder is normal in all respects. The latitude of motion is much diminished. She is unable to put her hand upon her head or upon the back; she can barely touch the opposite shoulder with the ends of the fingers, and this with intense pain. She complains of a binding sensation near the coracoid process, which is also the seat of the greatest pain. The exact pathological condition was regarded as obscure.

Dr. Latta remarked: There probably exists a state of chronic inflammation of some of the membranes of the joint, and doubtless some inflammation of the articular cartilages. He recommended the daily use of stimulating and resolvent lotions including iodine, with daily attempts at motion to prevent ankylosis.

Other cases were reported by Drs. Denny, Chamberlain, Cowan and Gilbert.

Dr. Latta delivered a lecture on the treatment of fractures of the thigh, illustrating his remarks with a patient and fracture-bed he had brought for that purpose. The fracture-bed is his own invention and is certainly a very ingeniously contrived, as well as useful affair. The lecture showed much originality and was full of practical suggestions.

Prof. McGraw remarked that Dr. Latt's appliance for counter extension to the great trochanter extension to the great trochanter was on an entirely new principle.

T. F. Wood, of Metz, read an essay upon the duties of the physician. On motion, the essay was ordered to be published, with the proceedings of the Society.

The Society proceeded to transact miscellaneous business.

Election of officers for the ensuing year was declared in order.

On motion of J. L. Gilbert, a committee of five was appointed to nominate three candidates for each of-

fice. The following names were reported as candidates:

For President: G. Erickson, G. W. Carr, and T. W. Wood. Secretary, J. L. Gilbert, C. A. Cowan, John Dancer. Treasurer, L. F. Abell. Vice Presidents, W. H. Landon, J. N. Chamberlain, C. A. Whyte, J. L. Haggarty. Censors, H. D. Wood, S. T. Williams, C. Palmiter. Dr. Erickson lead the first two ballots for President. On the third ballot T. F. Wood's name was withdrawn, and Dr. Carr was elected.

J. L. Gilbert, was elected Secretary.

The other candidates were elected by acclamation.

The new officers are: President, G. W. Carr; Vice Presidents, J. M. Chamberlain, C. A. Whyte, W. H. Landon, J. L. Haggerty; Secretary, J. L. Gilbert; Treasurer, L. F. Abell; Censors, H. D. Wood, S. T. Williams, C. Palmiter.

Professors Read and McGraw were elected honorary members.

The annual tax was then collected.

Drs. Teal, E. G. White, and Casebeer were appointed essayists for the next meeting.

Subject for discussion, at the next meeting, will be the mechanical treatment of uterine displacements.

On motion of Dr. D. W. C. Denny, the Secretary was ordered to publish the proceedings in the *Cincinnati Medical News*, *Detroit Review of Medicine*, and the *Indiana Journal of Medicine*.

On motion of J. L. Gilbert, the last Tuesday of each quarter was fixed as the day meeting, instead of the first as has been the custom of the Society heretofore.

The next meeting will be at Waterloo, on the last Tuesday of September, 1873.

The society adjourned.

Pursuant to previous announcement a large audience assembled at Mitchell Hall, at 8 o'clock, P.M. After prayer by Rev. Goodman, of the 1st Presbyterian Church, and

singing by the Kendallville Harmonic Society, Prof T. A. McGraw, of Detroit, delivered an address. His subject was the relation existing between the public and the medical profession. His remarks were well adapted to a public audience, and were well received. On motion of Dr. H. D. Wood, a vote of thanks was extended the speaker.

J. L. GILBERT, Secretary.

HOWARD COUNTY MEDICAL SOCIETY.

Tuesday, July 1st, 1873, being the 19th anniversary of the Howard County Medical Association, the doctors concluded to dedicate one day of their lives to a "feast of reason and a flow of soul." The following medical gentlemen were present: Prof. Dougan Clark, Richmond; S. T. Murray, Jerome; D. F. Hazzard, Jerome; Wm. Lomax, Marion; L. Williams, Marion; J. A. Adrain, Lagansport; J. Thompson, Indianapolis; J. H. Goodell, Walton; I. W. Martin, Ervin; W. H. Hornaday, Russiaville; A. Pitser, Sharpsville; H. Davis, Sharpsville; J. B. Tennel, Jerome; A. A. Covalt, Greentown; J. T. Scott, Greentown; G. D. Scott; J. B. Moore, Galveston; — McFatrige, Fairfield; — Kendall, Waupecong; — Moulder, Russiaville; — Lester, Lincoln; — Simpson, West Liberty; J. M. Darnell, Kokomo; A. F. Dayhuff, Kokomo; C. Richmond, Kokomo; E. A. Armstrong, Kokomo; I. C. Johnson, Kokomo; Wm. Scott, Kokomo; R. Q. Wilson, Kokomo; O. H. Martin, Kokomo; E. W. Hinton, Alto; L. Kern, Alto; D. C. Miller, Alto.

Most of the above named were accompanied by their ladies. The first thing in order was a business meeting at 10 A. M., and adjourned for dinner. After dinner an hour or two were dedicated to a kind of free and easy time around the city, and at 3 P. M., a public meeting

was held at Armstrong's hall, to which place the doctors with their wives and a goodly number of our citizens repaired and were very ably addressed by Dr. Lomax, upon the subject of "The importance of the medical profession to the public."

After the lecture, a general discussion ensued and was participated in by the medical gentlemen present pretty generally. That discussion, of course, embraced the various subjects of interest to the profession, including that dread plague cholera. After the close of the promiscuous discussion, the meeting adjourned until 7½ o'clock at the same place.

At the appointed hour quite a large assembly of our citizens greeted Dr. C. Richmond, the pioneer physician of the county, when he, in a few well timed remarks, gave a synopsis of his history of the association from its organization, nineteen years ago. The society was organized on the 29th of July, 1854, with the following named members: Drs. C. Richmond, A. F. Dayhuff, — Morgan, — Pettijohn, — Earloquhar, J. A. James and others.

The vicissitudes of the association at that time were severe, but now they are out of the brush, lifted above the mud and on the high road to prosperity. The membership at this time numbers about thirty earnest workers for the amelioration of the condition of our race.

After the conclusion of the address, by Dr. Richmond, he introduced Prof. Dougan Clark, of the Indiana Medical College, and for two hours he held the audience as though entranced by his brilliant ideas, scintillations of wit, and clear, cool, logic.

His subject embraced the "Science and art of Medicine," and we will do him the credit of saying, that it was a scientific lecture, devoid of the usual drouth surrounding such productions.

After the conclusion of the lecture, the physicians

present, with their ladies and several invited guests not members of the profession, repaired to Harmonic hall.

After all had been refreshed, the next thing in order was toasts and responses.

Dr. Mavity announced the first toast, "The pioneer editor," which was responded to very elegantly by our friend T. C. Phillips, of the *Tribune*.

Next, "The public school system of Indiana." Response by Prof. M. B. Hopkins, in a very neat ten minutes speech, in which he took occasion to review the school system, school fund, etc., of the state, and stated that Indiana was far in advance with her public schools of any state in the Union.

"Harmonic Society," was responded to in a very modest and well timed speech by W. P. Vaile.

"The clergy that endorse legitimate medicine" found a respondent in Elder Wood, and he handled quackery without gloves. He spoke of the profession of the pulpit and medicine as going hand in hand from the earliest history, both sacred and profane, and the great head of the church, while he went about pouring oil and wine upon the wounded and bruised spirits of the people, did not disdain from healing physical maladies.

"The medical profession" met with an elegant and eloquent response from Prof. Dougan Clark.

"Thank God for eyes." Response by Dr. Thompson, in which he said a great many good things, among which he hoped the members would not be *myopic* nor *presbyopic*, but *oxyopic*, and ever keeping an eye single to the interests of their patients and the glory and credit of the profession.

The various exercises were interspersed with music by the society, that gave a pleasure, dignity and eclat to the occasion that naught but sweet music could afford.

After voting thanks to the orators, entertainers and host, the meeting adjourned at midnight.

The celebration of the nineteenth anniversary of the society was a season of pleasure that will long occupy a place in the pleasant memories of the participants.

PROCEEDINGS OF THE FOUNTAIN AND WARREN MEDICAL SOCIETIES.

[*Reported for the Indiana Medical Journal.*]

COVINGTON, IND., APRIL 15, 1873.

The annual meeting of this Society, held at Covington, April, 10th, 1872, was the day for the election of officers, and for appointing delegates to the National and State Societies, and the second Thursday in April designated, in order that the gentlemen selected as delegates should have sufficient notice thereof, and thus have ample time to arrange their business so as to be enabled to leave their homes.

Owing to the condition of the roads and streams, in consequence of high water, the attendance was smaller than usual, but still sufficiently numerous to carry on the business of the meeting.

Doctor E. E. Hunt, of Harveysburgh, was, upon his application, admitted to membership.

Upon a ballot for officers for the ensuing year, the results were found to be as follows:

For President—Dr. Justin Ross, of Warren county.

For Vice President—Dr. E. T. Spottswood, of Vermilion county.

For Secretary and ex-officio Treasurer—Dr. S. J. Weldon, of Fountain county.

For Censors—Dr. C. E. Hunt, of Fountain county; Dr. T. B. Campbell, of Warren county; Dr. Justin Ross, of Warren county.

For Delegates to the American Medical Association—Dr. C. D. Watson of Fountain county; Dr. E. T. Spotts-

wood, of Warren county; Dr. Justin Ross, of Warren county.

For Delegates to the Indiana State Medical Society—Dr. A. J. Porter, of Warren county; Dr. M. T. Case, of Fountain county; Dr. G. S. Jones, of Fountain county; Dr. E. C. Hunt, of Fountain county; Dr. S. J. Weldon, of Fountain county.

Alternate Delegates—Dr. C. D. Watson, of Fountain county; Dr. O. Aborn, of Warren county.

The retiring Secretary filed a report as Treasurer, which was adopted and ordered on file.

On motion, the Secretary was directed to forward a report of the proceedings to the INDIANA MEDICAL JOURNAL, for publication. Also, that he furnish every newspaper published in the territory included by the Society, with a condensed report of the proceedings.

Also that he furnish the Secretaries of the American Medical Association, and of the Indiana State Medical Society, with the names of the delegates to their respective Societies.

Also, that he furnish the officers and delegates not present at this meeting, notices by mail or otherwise, of their election or appointment. Also that he forward to all the delegates the proper credentials of their appointment.

Doctor C. D. Watson, of Fountain, introduced the following preamble and resolutions, which, in view of the small number of members now present, was laid on the table, and made a special question for action at the next meeting of the Society:

WHEREAS, It is, as declared by the American Medical Association, the imperative duty of every physician to be a member of some local Medical Society; and

WHEREAS, The present requirements of this Society are not too high to admit as members all practitioners worthy of associating with us in consultation; therefore, be it

Resolved, 1st. That all such practitioners within the

territory included by our Society, be urgently invited to present themselves as candidates for membership. And

2d. That all practitioners who shall fail to unite with us within six months from the adoption of this resolution, shall thereafter be debarred from the privilege of consultation with members of this Society.

The following amendment to the constitution was offered by Dr. S. J. Weldon, of Fountain county, which, under rules of the Society, was laid over for consideration at the next meeting:

"From and after the second Thursday in October next, ensuing, which is the day of the semi-annual meeting at Williamsport, no person who is not a graduate of some respectable Medical College, or a member of some other medical Society, and bearing a respectable dimit therefrom, shall be eligible to membership in this Society."

No further business appearing, the Society adjourned.

SAMUEL J. WELDON, M. D. *Sec'y.*

Reviews.

WILSONS HERALD OF HEALTH AND ATLANTA BUSINESS Directory, 43½ White Hall street, Atlanta, Ga.

FLINTS PRACTICE, a treatise on the principles and practice of Medicine; H. C. Lee, Philadelphia; Cathcart & Cleland, Indianapolis.

TWENTY-SEVENTH ANNUAL ANNOUNCEMENT OF STARLING Medical College, Columbus, Ohio, next Session commences October 15, 1873.

CHEMISTRY, GENERAL MEDICINE, AND PHARMACEUTICAL, including the chemistry of the U. S. Pharmacopeia. A manual of the general principles of the science and theories applying to medicine and pharmacy, by John Attfield, Ph. A., F. C. S., Prof. of Practical Chemistry to the Pharmaceutical Society of Great Britain, etc.; H. C. Lee, Philadelphia; Bowen & Stewart, Indianapolis.

This is the fifth from the fourth English edition of this valuable work, those who have studied his former

issues need not be reminded of its value, and those who have neglected to obtain it should do so at once, as it treats the subject, as indicated in its title page, in a different and more directly practical manner than any text book we are acquainted with.

FAMILY THERMOMETRY, a Manual of Thermometry for mothers, nurses, hospitals, etc., and all who have charge of the sick and of the young, by Edward Seguin, M. D.; J. P. Putnam & Son, New York; Bowen & Stewart, Indianapolis.

This is a simple but concise manual, touching the fundamental principles and initiatory steps of practice as regards the thermometer in medicine. The medical student and practitioner as well as the nurse should not be without it.

CONTRIBUTIONS TO PRACTICAL SURGERY, by George W. Norris, M. D., late Surgeon to the Pennsylvania Hospital, etc., Lindsay & Blackiston, Phil.; Cathcart & Cleland, Indianapolis.

These are a series of essays, many of which attracts considerable attention while passing through the pages of the *American Journal of Medical Science*, while others never yet given to the profession are added.

"On the occurrence of non-union after fracture," on the treatment of deformities following unsuccessfully treated fracture," "compound fracture," "statistics of the mortality following the ligature of arteries," are some of the subjects treated. This is the kind of material which the medical literature ought to be enriched, and such special treatises should be eagerly read and studied by the practitioner, it giving him what he will not find in the many excellent text books.

A HANDBOOK OF MEDICAL ELECTRICITY, by Herbert Tibbits, M. D. L.R.C.P., London; Medical Superintendent of the National Hospital for the Paralyzed and Epileptic, with sixty-four illustrations; Philadelphia, Lindsay & Blackiston, 1873; Cathcart & Cleland, Indianapolis.

"I should hesitate to add to the multitude of treatises upon medical electricity which are before the profession

did I know of any which, avoiding contested points in electro-physiology and therapeutics, teach the busy practitioner not only when to use electricity, but *in explicit and full detail*, how; and which in moderate bulk contain only what is essential to master."

So says the preface. This is a fitting companion to the "Handbook of Physiology," of D. Sanderson, speaking of medical electricity somewhat upon the same style as the latter does upon physiology, experimental rather than dissecting the different views. Medical electricity and electro-medicine are first noticed, with the different varieties of electricity. *Franklinism, voltarism, faradism*, then the application of electricity as to the benefits of the several varieties, and as regards the locality to which each seems best suited. Electricity as an aid to diagnosis is next treated, and last, electro-therapeutics in general.

CLINICAL MEDICINE. An introduction to the study of Clinical Medicine, being a guide to the investigation of disease, for the use of the Student, by Octavius Sturgers, M. D., Cantab. Fellow of the Royal College of Physicians, etc., H. C. Lee, Publisher, Philadelphia.

"This manual assumes no more than to point out to the student a method of interrogating patients at the bedside," so says the preface, and in accordance with such design it commences with "general rules," "examination of patients," "examination of the functions," and continued with special examination of different parts, concluding with some thoughts upon treatment.

Certainly to the student this is to be considered a valuable little work, and not to be dispised by the average practitioner—for he who is familiar with all facts contained, is indeed well posted. The following assertion is a truth, the demonstration of which we conceive would not be difficult:

"With the tendencies of the present day there is need, I believe, to lay stress upon the fact that it is less by the use of subtle arts and intricate instruments than

in the exercise of common observation, directed by method, that the phenomena of diseases are revealed.

REPORT OF COLUMBIA HOSPITAL FOR WOMEN AND LYING-IN ASYLUM, Washington, D. C., by J. Harry Thompson, A. M. M. D., Surgeon in Chief, Washington, 1873.

This is a large volume of 430 pages. This hospital, the result of a suggestion of Dr. Thompson, was established by order of Secretary Stanton, in 1865, and a charter granted in 1866. We find from the report that 21 per cent. more gratuitous medical and surgical aid is furnished here than in any one hospital in the country; in 1871, total number of patients, 4,576; 1873, 11,455; what a field for observation and study! This should stimulate others to found and carry on similar institutions, though it could not be done upon the same scale it would answer all important ends.

In the introduction, a fitting tribute is paid Surgeon General Barnes and Dr. Woodward, for their labors, of which all are advised.

Examples of the various diseases brought under treatment, with ample illustrations are given in the body of the work. Every one interested should try and obtain the report and study it.

There are also very interesting reports in the department of Disease of Children, by Samuel Busey, M. D.; and Disease of the Eye and Ear, by D. Webster Prentiss, M. D.

In another number will be found an extract from the former taken from report on entero-colitis, cholera infantum, dysenteria, and dentitis difficilis.

Editorial.

IN our acknowledgements of kindness shown during a recent visit to Cincinnati, as found in last number of this Journal, the name of Dr. Conner appears where Dr. *Carsons* should be—for while we much desired we were not so favored as to interview Dr. Conner. Had it not been for Dr. Carson, we, perhaps, should have failed in our very pleasant and profitable visit to the Cincinnati Hospital.

THE first Monday in July we spent in Rushville, Ind., in attendance upon the "Rush County Medical Society," and are pleased to be able to report that this is a live association, as shown by the interest taken by members and their discussion of subjects introduced. This society meets the first Monday in each month at Rushville, we hope that every physician within its range will unite with it, and take an active interest therein.

The third Tuesday of same month we dropped in at the Hendricks County Society, at Danville, we found, for want of advisement with reference to a change in time of meeting, a sparse attendance, but those present were the "old reliables," and the interest did not flag. Hendricks county has a good medical association, and we only regret that we did not meet the majority of its members; the next meeting is the first Tuesday in September we believe.

AN interesting paper upon Position in Labor, appears in the July number of the *Chicago Medical Examiner*, by J. W. Smith, M. D., Charles City, Iowa. The doctor gives several illustrations of the truth of his views as regards the value of different positions in labor, he epitomizes as follows:

"To epitomize or briefly recapitulate the foregoing directions: Most cases have a lateral obliquity or pres-

sure, so to speak, and if the presenting part crowds upon, or most nearly fills one side of the pelvis, then upon that side is the proper position. If towards the hollow of the sacrum, place the woman upon her back, elevate the hips, and, if necessary, use external pressure. If towards the sacrum, and on one side, better place her upon that side, observing the arm is in position; and, if necessary, apply the bandage and support the back. If upon or towards the symphysis pubis, place her in a kneeling and almost horizontal posture, and, if necessary, upon the knees and face for a short time."

This subject is certainly an important one, more so than it is generally accredited, and we refer to the article for some very good ideas concerning it.

Hospital Reports.

A CASE OF CEREBRO-SPINAL MENINGITIS.

REPORTED BY S. J. BECKNEL, M. D.

Mr. M., age 22 years, (laborer,) of apparent good health; admitted May 10th, at 8 o'clock P. M.; seen by Dr. Oliver. Patient had been taken with a chill about twelve hours before admission; this was followed by headache, stupor, and extraordinary prostration.

At the time of admission his pulse was found to be 104; respirations 30, temperature $102\frac{1}{2}^{\circ}$, tongue dry and brown, bowels relaxed. Patient delirious, and could not be roused. Ordered bromide of potassium gr. xxx, and chloride tr. iron m. xx. The above was repeated, but was rejected at once after swallowing. Ordered blister for nape of neck.

May 11, 6 o'clock A. M. Patient partially rational; complains of pain in back of head and neck. Gave $\frac{1}{2}$ gr. of sulph. morph. by hypodermic injection. 12 o'clock M. Patient takes some nourishment. Beef-tea was given in small quantities at irregular intervals. 6 P. M.

Patient retains potassium and iron ; pulse now 108, temperature $102\frac{1}{2}^{\circ}$.

May 12. Patient lies with head thrown back ; complains of pain in joints and back ; stiffness of muscles of the neck. Has taken some quinine in connection with former treatment, which was continued. The hypodermic injections of morphia were repeated when necessary to secure rest. Bowels somewhat relaxed ; bladder evacuated with a No. VII catheter. Patient continues to take nourishment ; beef-tea was given in small quantities.

May 13. Patient lays upon left side, head almost at right angles with his body ; sleeps a deep sleep, from which he can be aroused only with great difficulty, and when aroused he answers reluctantly, and soon resumes his heavy sleep. The expression of his face is dull, eyes not fully closed. Treatment has been continued.

May 14. Patient complains of pain in wrists, and ankle joints are redened and swollen ; surface hot and dry ; frequently calls for water ; continues to take beef-tea. Pulse 108, temperature $103\frac{1}{2}^{\circ}$. Ordered a blister 4x8 for cervical region ; sulph. quinia grs. v ; brom. pot. grs. xxx, every two hours, with tr. of iron. Hypodermic injections were given to procure rest. Patient not having passed urine freely, bladder was again evacuated as before. 6 p. m. Pulse 120, temperature 105° .

May 15, 8 o'clock a. m. Patient more quiet ; pulse 110, temperature 101° . Ordered Dover's powder every three hours ; continued former treatment. 11 o'clock, p. m. Pulse 120, temperature $101\frac{1}{2}^{\circ}$.

May 16. Dr. Todd saw patient ; suggested calabar bean ; one grain of powdered given once in two hours, dose to be increased if necessary to produce desired effect ; turpentine emulsion with bromide of potassium. 12 o'clock m. Pulse 108, temperature 102° . Continued treatment. 2 p. m. Pulse 112, respirations 32. Continued treatment. Patient takes beef-tea and small por-

tions of nourishment. 4 o'clock P. M. Pulse not reduced, temperature about as before. 6 P. M. No perceptible change has taken place; gave 2 grs. calabar bean. Patient lies with head thrown back; skin hot and dry; tongue dry and feverish; joints swollen and redened. Patient delirious; respiration hurried; pulse full and rebounding. 10 P. M. Pulse 120, temperature $104\frac{1}{2}^{\circ}$. Stupor increases; mind confused; patient wanders, picks at the bedclothes, and ceases to complain of the pain in his head or limbs. The pulse is frequent; skin dry and dark; sordes collect on gums and teeth.

May 17, 1 o'clock A. M. Temperature 105° , pulse 120. Treatment continued. 3 o'clock A. M. Pulse 116, very full; surface hot and dry; pupils dilated; temperature $104\frac{1}{2}^{\circ}$. Gave calabar bean grs. ij, morphia by injection $\frac{1}{4}$ gr. 6 A. M. Pulse 120, temperature 104° , with head in normal position. Respiration 36; surface moist. 8 A. M. Pulse 120, full, and rebounding; surface moist; patient lies in normal position, with complete loss of consciousness; perception and volition are alike suspended, and there is an appearance of the profoundest sleep, the expression confused, pupils sluggish and dilated. 12 M. Gave grs. iij calabar bean; pulse 120, respirations 36; patient perspires freely. 2 P. M. Continued the treatment. 4 P. M. Patient comatose; continued calabar bean in three grain doses. 6 P. M. Pulse 128 full; temperature 103° ; pupils slightly contracted; continued treatment. 8 P. M. Pulse 136, respiration 40; patient sleeps with eyes partially open. 12 M. Temperature 105° , pulse 140; extremities cold.

May 18, 4 o'clock A. M. Patient could not swallow; the calabar bean and emulsion were now discontinued; hypodermic injections were given once in two or three hours. 8 A. M. Pulse 136, temperature $105\frac{1}{2}^{\circ}$. 2 P. M. Patient takes a small quantity of beef-tea; temperature as before; respirations 48; pulse very rapid. 6 P. M.

Respirations 60, temperature $106\frac{1}{2}^{\circ}$, pulse hardly perceptible; cold and clammy perspiration. Patient died at $7\frac{1}{2}$ o'clock P. M.

REPORT OF AUTOPSIES AT CITY HOSPITAL.

BY THAD. M. STEVENS, M. D., PATHOLOGIST.

E. Smith, admitted July 1, 1873, with symptoms of chorea, soon becoming insensible; death occurring in a few hours; section by Dr. McDonald and Ketchan. Head, thorax, and abdomen examined; adhesion of pleura of left side; appendix vermiform adherent; intense congestion of greater part of ilium and part of jejunum; congestion of pia-mater; 3iis of bloody serum in cavity of cranium; no other abnormal appearance. Lacking the history of the patient before entering, the cause of the pathological appearance could not be satisfactory determined; death was without doubt the result of the morbid changes described within the cranium.

Miscellaneous.

NOTED DISADVANTAGES OF LARGE DOSES OF QUININE.—By Dr. C. BINZ. (Deutsche Klinik. Condensed by Bettelheim in Med. Chirug. Rundschau.) Through the author's efforts especially we have left the administration of quinine by the grain, and now give it in scruple doses during the period of remission. Because everything that is generally useful, naturally does harm occasionally, Binz thinks it necessary to call attention to these disadvantages.

1. Disturbances of the nervous system and the heart.

Quinine is a poison to the heart, kills by direct paralysis of the motor apparatus, probably the muscular substance. After death by quinine, in warm-blooded animals, the heart is found in the diastole, and Binz believes that in such cases the "contents of the muscular fibres themselves" are injured; this influence of quinine on the heart's action must be especially considered in croupous pneumonia (Juergensen.) In this disease the patient dies, except the "rare cases in which the fever or lung affection are the cause of death, of insufficiency of heart power." If, therefore, quinine is used on account of its action on the fever and formation of pus, especially in the beginning of pneumonia, we must always consider these cases wherein its action on the muscle of the heart predominates. Binz thinks that the cause of the cyanosis and dyspnœa, which he noticed in two cases of pneumonia, was the administration of quinine, as no other cause could be found, and that the cyanosis did not appear before the use of quinine or after its discontinuance.

In literature, Binz notes the case of Giacomini, (1845,) where somebody by mistake took three drachms sulph. quinia in one dose. In the course of an hour, pain in head and stomach, dizziness, unconsciousness; nearly complete loss of sight and hearing; pulse even, slow, hardly perceptible; prostration, weakness of sight and hearing lasted for a long time.

2. Disturbances of hearing. Example of high degrees of such disturbances: Mullett tells of a friend, an officer in Algiers, who, after taking twelve grains of quinine, was relieved of a persistent intermittent fever complicated with delirium, coma, etc., but who became completely deaf and remained so (at least for ten years.)

3. Disturbances of power of speech. A boy aged 12, received two and a half shillings worth quinine for intermittent fever. After taking it, the fever disappeared,

but he remained completely mute, until after one year he was again attacked by a quartan; this was relieved by preparations of ammonia. (Casper's *Wochenschrift*, 1845.)

4. Disturbances of vision. Briquet, who of all living physicians has tried quinine most frequently, has noted incomplete amaurosis in four cases, after three or five grammes; this lasted in one case a whole month. Graefe also calls attention to two cases of amaurosis after the use of quinine, both times associated with disturbances of hearing. In one case the weakness of sight began after the continued use of quinine during some weeks for intermittent, taking in all six drachms. The left eye improved in the course of a month without medication, but the right eye was still weak after four months. Graefe thought it possible that not the quinine, but the accumulation of pigmentary bodies within the brain's vessels, might have been the cause of the amaurosis, as the patient could not be kept under observation. In the second case a total ounce of quinine was taken (but never more than fifteen grains in a dose) for fever and ague. Buzzing in the right ear, and complete loss of sight in the right eye took place without change that could be detected by the ophthalmoscope. After six weeks treatment (depletion) nearly perfect restoration took place.

5. Hemorrhage and eruption. The first (hæmoptisis) as a result of the use of quinine has not been proven. Also, the appearance of purpura hæmorrhagica after even small doses of quinine, has been noticed in four cases. (*Gaz. des. hopitaux*. 1867.) In the English periodicals two cases are mentioned, in which repeatedly after the use of quinine, a diffused itching erythematous eruption, took place with consequent desquamation and œdema.

6. On the stomach and intestines, especially in fever patients, the non-solable quinine salts especially act

harmless, probably because the stomach of fever patients lacks free acid. (Manassein.)

7. Disturbances of the kidneys and bladder. By means of quinine in large doses, according to Briquet, albuminuria and cystitis may be produced. On the other hand the experimental researches of Binz on the action of quinine on the pus corpuscles, go to show that it acts beneficially in cystitis.

After all, it is certain that the dangers of quinine medications are comparatively few, if we consider its value in inflammatory and putrid fevers.—*From the Detroit Review.*

LABORATORY NOTES—ON THE CALCULATION OF ANALYSIS.—When a person is making many analyses of the same kind, it is well to reduce all the calculations to a uniform system. For instance, in determining the number of grains of residue in one gallon of water, it is troublesome to perform the complete multiplication every time. This may be avoided by making out a little table like the following, which gives the number of grains in one U. S. gallon of 231 cubic inches for each centigram of residue found when 100 grams of the water are evaporated in a light platinum dish :—

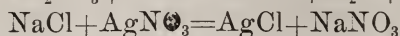
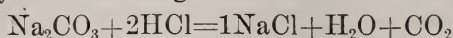
.01 gram = 5.8317 grains.	.06 grams = 34.9902 grains.
.02 " = 11.6634 "	.07 " = 40.8219 "
.03 " = 17.4951 "	.08 " = 46.6536 "
.04 " = 23.3268 "	.09 " = 52.4853 "
.05 " = 29.1585 "	

Thus, for instance, if .0586 grams of solid residue are found, the calculation becomes a mere question in addition, as follows :—

.05	grams	=	29.1585	grains.
.058	"	=	4.66536	"
.0006	"	=	.349902	"
				<hr/>
				34.173762 "

Another short step in calculation is very apt to be overlooked by beginners; that is, in calculating the

results of an analysis, it is but rarely necessary to calculate the intermediate steps. Take, for example, the determination of the amount of sodium in carbonate of sodium, by the following reactions :



and on ignition in a stream of hydrogen, we obtain pure silver. It is not necessary to calculate from the amount of silver found the amount of chloride of silver, and from this the amount of chlorine in the chloride of silver, and then the amount of chloride of sodium, as is too frequently done. A moment's thought will show that for every atom of silver found at the final weighing, an atom of sodium, or half a molecule of carbonate of sodium, must have existed in the original compound. The proportion becomes then merely

$$108 : 23 = w : x;$$

w = the weight of silver found, and x the weight of the sodium. If, now, a number of similar determinations are to be made, divide 23 by 108, thus obtaining the factor .213. Then the weight of silver multiplied by .213 will give the weight of sodium required. A small table of such factors make a very convenient help to calculation, especially if instead of the factors themselves the logarithms are entered. The calculation of an analysis is then reduced to the following simple rule: Add together the logarithm of the weight found and the logarithm of the factor, and from the sum subtract the logarithm of the weight taken.

Dr. Gibbs has recently made out a table of such factors, and these, together with a neat four-place table of logarithms and antilogarithms, are published by Mr. C. W. Sever, of Cambridge, Mass.

In stating the results of an analysis, as a general rule, all decimals after the second should be rejected. The reason for this is that but few of our methods of analy-

sis will give results that are accurate to one part in ten thousand; most of them, indeed, are not to be relied upon to one part in a thousand.—*Boston Journal of Chemistry.*

DRAWING-ROOM DRUNKARDS.—In a recent paper read before the Irish College of Physicians on this subject, Dr. Alfred H. McClintock says: ‘It is matter of notoriety that the immoderate use of diffusible stimulants has greatly increased of late years, among classes whose education and social condition should have been sufficient preservation against this destructive vice. It is well known to physicians, that alcoholism is to be met with among the occupants of drawing-rooms as well as the frequenters of tap-rooms. What has so widely spread this pernicious habit among the present generation, it would be difficult to say. Probably more causes than one have contributed to bring it about. I can not help thinking that the intense strain put on the intellectual faculties in every profession, trade, and pursuit, the mental competition of these days, must create or foster an appetite for diffusible stimulants. Nervous exhaustion craves for the alcoholic stimulus; whereas physical or muscular exhaustion will more eagerly demand solid aliment. Furthermore, to be candid, I must own to a feeling that our own profession is not wholly free of blame in this matter. I know well I am here trenching on delicate ground, but, “*Amicus Plato, amicus Socrates, magis amica veritas,*” and I strongly suspect that the modern treatment of disease by the free use of stimulants, though fulfilling an important therapeutic indication, has occasionally developed a morbid habit or taste, eventuating in moral and physical disease of an incurable kind. I would qualify this, however, by adding that the declaration of inebriates themselves on this point is of no value whatever, as they are notoriously untruthful, and are always but too glad to throw the blame of their evil habit on the physician or surgeon.

‘Nearly all of the cases of alcoholism which have fallen under my immediate observation were females of the better class in society. All, with scarcely an exception, concealed the habit they had acquired of drinking to excess, so that it often needed a lengthened investigation and a careful analysis of all the symptoms, before any positive conclusion, as to the real cause of the patient’s condition could be arrived at.

‘All sought medical advice on account of some derangement belonging to the alcoholism, though apparently not themselves recognizing the source from whence their ailments sprang. I should qualify this by saying that a few were brought by friends who had no suspicion of the patients’ habits. The intoxicating liquors taken varied a good deal, viz., brandy, gin, champagne, port, sherry, whiskey, ale, porter, and, in one case, tincture of ginger—of which her daily allowance, for a length of time, was one pint. This unfortunate lady, who moved in a high circle, and was what is originally called a strong-minded person, eventually died of jaundice, enlarged liver, and ascites. It is very well known that, where the ordinary spirit can not be obtained, the victims of this passion will not hesitate to drink ean-de-Cologne, lavender-water, sal volatile, compound spirits of lavender, and, in fact, any spirits they can lay their hands on. Most of us here have known, or heard, of the museum porter at one of our schools of medicine, who used to drink the spirits of wine off the anatomical preparations, when he had not the means of buying a more potable description of alcohol. In justice to his palate, I must add that this was before the methylated spirits came into use.

CARPENTER ON THE SUPPOSED DANGERS OF SEWAGE-FARMS.—Dr. Alfred Carpenter has replied to a question raised by the Croydon Microscopical Club, as to the possible effect of the ova of entozoa upon human beings

through the operation of sewage-farms. He states that the subject is one which has engaged a good deal of his attention, ever since sewage-farms were established, and he has given the matter his serious consideration. He has had occasion to express the opinion, that although the dangers feared might arise, they did not. It was found, by reference to the books of the Poor-Law Medical Officers, by inquiries of his own medical friends, and by his own experience, that cases of *tænia solium* were all but unknown among the inhabitants of Croydon. When cases did occur, it was generally (not invariably, of course) among those who had lived some time in India, in some part of the centre of Europe, or in Africa, showing conclusively that the ova developing the disease had been planted in the human frame in other countries. People who made the charges against sewage-farms did not know anything about the management of them, and described them in a manner contrary to fact. They supposed that the ova of entozoa would be carried on to the land, applied to the crops, and then consumed as ova by the cattle upon the farm. This idea showed at once their want of knowledge as to what sewage-farming meant. No such contamination could occur, except by accident, such as might happen in anybody's kitchen, where meat which might find its way into the cook's hands with *trichina spiralis*, or other parasites, in it was not properly cooked or was eaten raw. If people cooked their meat properly, no evil could result; and if sewage-farms were properly managed, no danger from entozoa could arise. Of course, the possibility of such an accident was to be guarded against, but it was not sound argument against a sewage-farm. With reference to another point—the destination of the millions of the ova of entozoa which undoubtedly do find their way to the irrigation-farm at Beddington—Dr. Carpenter states that he often searched for them years ago at the outfall, but never found them. He

thought that a good work might be done in solving the question of development by following out a point which he had not hitherto found time to do. He had an idea that the ova of entozoa, placed in other channels in other conditions as to moisture and temperature, might develop into some other form than that of parasites. He had not found the ova of entozoa, but in every running stream exposed to the air he had never failed to find the blood-red worm, the 'naiad,' waving its body about. It was contrary to received opinion that such a development should occur, but whence the 'naiad,' and where were the parasitic ova of the entozoa? With reference to this latter question, Mr. H. Lee, the well known naturalist, has offered to place at the disposal of Dr. Carpenter an apparatus which he has at Brighton, and which can be submitted to the action of a running stream as long as may be necessary. The solution of the problem is important, as tending to prove the fallacy or otherwise of one of the supposed dangers of sewage-farming.

BARON JUSTUS VON LIEBIG.—This eminent chemist died at Munich, on the 18th of April. He was born at Darmstadt, May 12, 1803, and was educated at the Universities of Bonn and Erlangen, where he took his degree as Doctor of Medicine. In 1822 he went to Paris, and studied there for two years, associating with the great French chemists, Gay-Lussac, Dumas, Pelouze, and Mitscherlich. At the early age of twenty he was an original explorer in the domain of organic chemistry, and his paper on fulminic acid and the fulminates, written in 1823, gained him the friendship of Humboldt and a professorship of chemistry at Giessen.

Of his researches and his published works we will not attempt even an outline sketch. It has been well said that he was the father of applied chemistry. "As Socrates 'brought philosophy down from heaven and

made her discourse in the market-place,' so did Liebig drag chemistry from the laboratory and make her labor to cheapen our food, to lengthen our days, to bless our fields and crops, and to fill our garnerers with all manner of store."

The great chemist had his crotchets, it is true; and some of his theories he pushed to an extreme. But the number of his discoveries can hardly be counted, nor can their importance be overestimated. "He stands, indeed, to chemistry much as Watt stands to mechanics. He caught Ariel, prisoned him, and made him work for man; and in a ripe old age he passed, not before he had seen his dreams realized and his hopes fulfilled."—*Boston Journal of Chemistry*.

At a late meeting, the Board of Regents, of Michigan University, passed the following:

WHEREAS, The Legislature of the State of Michigan, at its last session, re-enacted the law of 1855, requiring the appointment of Homœopathic Professors in the Medical Department of the University; and, whereas, it has always been claimed by the Board of Regents that the law was an infringement upon the rights and prerogatives of the Board; and, whereas, the Supreme Court of the State has refused to grant a *mandamus* requiring the Regents to comply with the law, thereby substantially confirming their action, therefore,

Resolved, That we maintain the position heretofore taken, and decline to make the appointments required by law.

Resolved further, That we do this in no spirit of factious opposition to the apparent will of the Legislature, but because we believe the true and best interests of the University demand it.

Resolved, That we re-affirm the former action of the Board expressing a willingness to take official charge of an independent school of Homœopathy, and connect it with the University, whenever the means shall be provided for the payment of its professors.

THE EMPLOYMENT OF PESSARIES. John Lambert, M. D., Salem, N. Y., (*Journ. Gynæcological Soc.*) in a communication on "Uterine Displacements," says that the use of pessaries in these cases complicates treatment, and hazzards successful results. In a certain proportion of cases of uterine displacements, a comparatively small number of well-fitting pessaries, in the hands of intelligent and skillful gynæcologists, are essential to the cure, not only of the mal-position, but also of the abnormal condition of the organ which accompanies it. A pessary, of whatever kind, when employed for the mechanical support of the uterus, is a foreign body, liable to do serious, and perhaps fatal mischief, and never should be placed in situs without great circumspection on the part of the physician. It has no miraculous power, and its potency for harm is very much underrated.

He is of the opinion that intra-uterine, or stem pessaries, should seldom be used. Of the various forms of intra-vaginal pessaries in use, he prefers and employs the closed lever made of hardened rubber, and the soft ring made of delicate elastic strips of fine whalebone, covered with pure rubber, made by Tieman & Co.—*Medical Record.*

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THE RELATION OF THE PHYSICIAN TO THE EDUCATION OF THE PEOPLE.

[Read before the Academy of Medicine, Indianapolis.]

BY H. W. WILEY, M. D., INDIANAPOLIS.

MR. PRESIDENT AND GENTLEMEN:—I appear before you to-night a victim to the tendency of the age. The spirit of constitutional infringement has at last infected the Academy of Medicine, and the roster, that palladium of our liberties, has been ruthlessly violated. It is a sweet consolation to one who has been injured to know that wrong doing never goes unpunished. Sooner or later the criminal meets his just recompense of reward. And now after the lapse of a single week this august body is called upon to expiate its crime. The punishment is severe but merited.

In the execution of this penalty I desire to call your attention for a short time to a subject which nearly concerns us all, viz.: What are the relations of the physician to education?

The physician of the present day must be a teacher. He can not help himself if he would. Every day, it

may be unconsciously to him, his words, his example, his thoughts, have their influence upon his patients. The doctor has taken the place of the priest. He is now the Father Confessor, and to him are revealed secrets which the confessional has never known.

It is a truly valuable study to trace the causes which have evolved from sorcery and incantation, the mighty science whose pulses now thrill throughout the majestic body of civilization.

In early times when men first began to think, disease was supposed to be the influence of an evil spirit. In the very first glimmerings of intelligence good and evil were distinguished. Certain actions or certain influences were seen to result in happiness, physical well-being and contentment; other habits and actions were noticed to produce the opposite states. Soon, and naturally, all well being was referred to the good, and all ill being to the evil. But the lively imagination of the primitive man could not be satisfied with this; each good and each evil must have a real existence, and hence arose the complex systems of polytheism which spring up in the early history of every people.

As disease therefore was considered to be the presence of an evil spirit, the physician was either the priest or the wizard, and usually both in one.

A physician of this kind of course could not have much to do with the developement of his race. Any growth which might occur would take place in spite of him, instead of by his aid. His fellows might look upon him in awe, but would have no desire to follow in his steps. Indeed, it was to his interest to keep the people in profound ignorance of his power. To have known would have been to have suffered disillusion, and this he could not afford to allow.

Quackery in the olden time, even as now, could not endure the light of free investigation. The physician herefore, at first, was the antipode of the teacher. His

object was to mystify, not to clear up; to make complicated not plain. His only hope of preserving his power was to conceal his weakness; his only means of retaining confidence to abuse it. How much human nature is still like itself after thousands of years of evolution.

I have referred to this primitive stage of medicine in order to have a standard of comparison. We see by it that the early doctor was a negative not a positive teacher.

If the profession of the present day has made any improvement over the old condition of things, it will very readily appear. With Hippocrates, the true physician first appears. Not only does he present himself as a healer of diseases, but also in an aspect, which is no less truly medical, as a teacher of the people. He not only desired to cure, but also to instruct.

But neither Hippocrates nor Galen, nor their worthy co-laborers and students, could at once revolutionize the world.

The remedies prescribed were not potent unless the wizard priest should first exercise his charms upon them. The mutterings of meaningless syllables, the pompous and persistent imposition of hands, the burning of incense and the display of grotesque gesticulation, were for many centuries still believed to be the efficacious means of driving away the demon of disease.

When the light of intellectual growth which burned brightly two thousand years ago, was extinguished in the night of the dark ages, the office of physician became again for the most part the work of the magician. Strange compounds, prepared from the most loathsome parts of hateful reptiles and other animals, were brewed and administered as remedies of superhuman preparation and power. The spells and incantations used were very much like those so bountifully described by Shakespeare in the witch scene in *Macbeth*. Throughout the whole we may trace the constant refrain,

“Double, double, toil and trouble,
Fire burn and cauldron bubble.”

There was a firm belief in panaceas, and the search for them, constantly fruitless, was never wholly given over. The philosopher's stone, and the elixir of life which would give perpetual youth, were the objects of special search.

Wagner, old, gray and haggard, in his black laboratory attempts the formation of a new being, and after years of patient toil sees its outlines in the flask and dies in a terrific explosion.

Goethe represents Faust as one of the thoughtful physicians, who, after practicing his art for a long time quits it in disgust and makes a confession of his career. I can give you no better picture of the medieval doctor than by quoting some of his words:

"How few the steps up to yonder stone! Here we will rest for a time from our journeying. Here, wrapped in thought, I have often sat alone and calmed myself with prayers, and fastings. Rich in hope and firm in faith, with tears and sighs and wringing of hands I thought to compel the end of the plague from the Lord of Heaven. The wail of the multitude sounded to me like the day of doom. O, could you read my inmost soul, how little you would esteem father and son worthy of honor!

"My father was a worthy man with peculiar notions, who meditated after his own style upon nature and her holy powers, who shut himself up with alchemists in his dingy laboratory. This is his prescription: 'A red lion, a bold lover, marries the lily in the tepid bath, and both then were tortured with flaming fire from one bridal chamber to another. If then the young queen appeared in the glass with varied hues, there was the medicine. The patients died and no one asked who recovered. So have we with these hellish electuaries, here in these valleys and villages, slain more than the plague. I myself have given the poison a thousand times.'"

These are the words of a thoughtful man who saw that his profession was a cheat, and he himself a monster and not a benefactor. Surely such as these could not be teachers of their kind.

The long pole of Luther's reformation stirred the stagnant intellectual cesspool to its depths. Medicine, with every other science, received a fresh impulse. But unfortunately in medicine, as in religion, the reformation did not stop at the proper point, but was rapidly pushed into extremes and sectarianism. The most absurd faith was reposed in certain remedies and processes, everything not recognized and recommended by the *faculty*, was rigidly excluded although of undeniable merit. It was the old story of the blind following the blind. The extremes of sects are the natural reaction against tyrannous and long continued monocracy. Men revel in their new freedom, and with that strange infatuation which leads them on to unconscious suicide, abuse it. Around these intemperate men schools are formed which rapidly extend their membership until all are embraced in them. One of these schools becomes pre-eminent, generally in wildness of theory and blindness of practice, as well as in members. This becomes the "regular profession," and is a law and conscience to its members. They yield to it a blind and narrow obedience.

At the present day, when the "regular profession" have become the true eclectics, using freely everything which is proved good, we scarcely can conceive of the blind obedience our predecessors gave to authority—three hundred, two hundred, one hundred, even fifty years ago. Moliere, in his fine satire of Monsieur de Pourceauguac, gives a fine stylograph of the typical physician to whom I refer, at the same time illustrating the confidence imposed in him by the people.

Erastus—Looking for a doctor addresses an apothecary whom he mistakes for one: "I believe, sir, you are

the doctor who has been consulted on my recommendation.

The Apothecary—No, sir; I am not the doctor. that honor does not belong to me; I am only the apothecary, at your service.

Erastus—Is the doctor at home?

Apothecary—Yes, he is now engaged with some patients, and I will tell him directly you are here.

Erastus—No, do not stir; I will wait until he is done. This visit is for the purpose of placing in the doctor's care a certain person we have with us and of whom the doctor has been spoken to, and who is troubled with a slight attack of insanity, which we would be very glad to have him cured of before he is married.

Apothecary—I know what it is? I know what it is? For I was with him when he was spoken to about the case. Believe me, you could not have applied to a more skillful physician; he is a man who has medicine at his finger tips, just as I have my faith in heaven, and who, when any one is to be treated, will never step aside one iota from the rules of the ancients. Yes, he follows the grand old road, the grand old road, and never looks for mid day at four o'clock. For all the money in the world he would not cure a person with other remedies than those which the faculty recommend.

Erastus—It is a good principle. A patient ought not to get well without the consent of the faculty.

Apothecary—It is not because we are great friends that I speak of it, but there is a pleasure in being *his* patient. I would much rather die under his remedies than to get well under those of another. Whenever he comes one feels assured that things will always be done in order; and if you die under his treatment your heirs will have nothing to reproach you with.

Erastus—That is a grand consolation for a dead man.

Apothecary—Assuredly, it is much better to die methodically. As to the rest, he is not one of those doctors

who make sickness a matter of speculation. He is a quick man, a rapid man, who is eager to get rid of his patients; and when one has to die he brings about the result as rapidly as possible.

Erastus—There is nothing like going at a thing promptly.

Apothecary—That is true, it is necessary to know quickly the course and length of a disease.

Erastus—You are right.

Apothecary—For instance, three of my children, whom he did me the honor to treat during their sickness, died in less than four days, who in the hands of another would have languished more than three months.

Erastus—It is a good thing to have such friends as that.

Apothecary—Without doubt. He has left me two children, of whom he takes care as if they were his own. He uses them and controls them according to his fancy without any interference on my part; and very frequently when I return from the city I find them bled or purged by his order."

This is scarcely an overdrawn feature. The patient in this case was bled fifteen times by the doctor's order, "And is he not yet well?" inquires the doctor, "No." "This proves that the disease is not in the blood, we will have him purged as many times to see if it be not in the humors."

In this man we have the type of the iron clad doctor, one who regards not the patient but the books, with whom the authority of the fathers has more weight than the reason and common sense of the sons. Happily their number, though not yet few, is not as it once was, legion.

Such men were not true educators; their followers were blind followers, not intelligent students. They had therefore no influence upon intellectual education.

In this hasty sketch of the past relations of the phy-

sicians to education, we have seen that with the exception of a brief era in Grecian history, and a still briefer one in the history of Rome, the medical profession was never an aid but always a hindrance to the education of the people. In other words there was no rational medicine, for rational medicine is always docent—it teaches as well as cures.

We now approach the vital part of our subject, the profession of the present day. We notice first how carefully medical science has been built up. It was a long struggle to eliminate every trace of the old system of magic and supernatural therapeutics.

But the underlying sciences of chemistry, anatomy and physiology would tolerate nothing of the kind. There was no denying that even the senseless twaddle and important 'applications of the magic doctor had produced good effect, but physiology stepped to the front and explained how this was effected through the nervous system, demonstrating the intimate relations existing between the nervous centers and the organic functions.

The great truths which support modern medicine were published to the world. They were generally received by doctors, and by them disseminated among the people. Men began to realize that they were truly, "fearfully and wonderfully made." The mysterious union of body and soul was brought as it were bodily before men's eyes; they were compelled to think, and to be thinking is to be educating.

There is no kind of study so well adapted to intellectual development, as the study of the nature of things. Metaphysics is but another name for acute ignorance. The ego and the non-ego, the realist and nominalist are delusions; physicians have, therefore, been unconsciously the cause of a great intellectual awakening, a revival of learning. It was the study of chemistry for medical purposes which gave the grand impulse which has made,

and is still making, chemistry the glory of science. It was the study of anatomy for medical uses that turned the attention of some to the study of comparative anatomy, upon which natural history, as a science, is based. Now, the world over, immense collections of specimens, like the Peabody, at Salem, and Agassiz's museum at Cambridge, have brought together the chief types of animal life that are found living or extinct upon the earth. It was the study of physiology in its relations to pathology, which first led to a true science of life and the relations of man to the physical world. The development of this science in late years has been truly wonderful. Flint and Mandsley have entered the unexplored regions of mind, the cosmos, and have drawn near the fountain of life. The great currents of thought have been turned into new channels; the old science of mental philosophy, which had never been anything but a castle in the air, has been brought down to earth and set upon a stable foundation; the vagaries of phrenology have been curbed and corrected, and psychology has assumed a high place among the sciences.

It is not claimed that all these great influences have been due wholly to medicine, but it is undeniable that they all had their rise and received their first fostering care within the profession. Physicians have always been the first to recognize the merit of any new truth which affected nearly the happiness of mankind. Thus we see from this cursory view that the physician within the last fifty years, has had a mighty influence upon the progress of thought, and has in reality been the most potent factor in the education of the people. The bread he cast upon the waters has returned to him after many days, bringing riches and blessings.

But his work is by no means done; he has only entered upon it. Heretofore he has been a teacher, for the most part, incidentally; hereafter he must be one directly. The age demands his instruction, it will com-

pel him if he refuses. First of all he is needed in the common school. If there is any one thing of which our civilization may justly be proud, it is our system of public instruction. It is at once both the substratum of the state and its crowning glory.

Look only at our own city, the poor man's child and the rich man's heir sit side by side at their studies; for a part of the day at least the poor tenement house and the gilded palace are forgotten, while the same treasures are offered to both. The Irish peasant's boy, the son of the emigrant from Saxony, the child of Norway's snow clad hills, and Africa's dusky offspring, are equal sharers with the native children. The State will forget her highest duty, sow the seeds of decay, and inaugurate her own ruin, when she ceases to foster and strengthen the public schools.

But they are not yet perfect. The physician's work in them is not yet accomplished. In the present working of things there is a lack of systematic culture. The brain of the child is over stimulated, his body is neglected. The one object is perfect lessons; to secure these the child's natural gaiety is subdued; he has no chance to romp when so many things are to be learned by heart. He becomes precocious. The teacher calls him her *little man*, the parents are delighted with his progress, and encourage him to be even more like a man.

This premature refining ruins everything. It stops growth and stamps mediocrity, sometimes even imbecility on the mind. The organic functions are disturbed; the girl is a woman at thirteen and old at twenty. The body is stunted as well as the brain. The cheeks are pale and the muscles flabby. The fire which burned so brightly at ten is dimmed at fifteen and only dead ashes are left at twenty-five. These certainly are extreme cases, but their number is not few. There is always a tendency to go in that direction. I doubt very much whether any boy or girl can take the whole continuous

course from the primary through the High School and come out perfectly sound. The greater number of course make average men and women, a few becoming shining lights, as many are utterly broken in mind, in body, and all are more or less victims of a well meaning but dangerous system.

It is the duty of the physician to see that this overmental crowding is corrected, that more attention be paid to hygiene and physical culture in the schools, that we begin with kinder-gartens, where the children will be taught to play, and allowed to grow healthy, strong and symmetrical. Close study is distasteful to the child. He is in a negative condition; his business is to grow; but he is by no means lazy. A lazy child is always diseased either from natural heritage or from post-natal neglect or abuse.

The establishment of the kinder-garten would be a step in the right direction. In the kinder-garten the child learns unconsciously. While he is amused he is instructed. He enters with zest into all its exercises; at the close of the day's duties he is refreshed, not exhausted, and eager for the morrow which will bring a like experience.

It is the province of the physician to see that these changes in the system of instruction for children, are inaugurated. The unanimous voice of the profession would compel obedience. Our school boards are perhaps not composed of angels, but they are more ignorant than wicked. Their sins of commission are not a few, but those of omission are in an immense majority.

The city has a board of health. Not only should the jurisdiction of this board extend over hospitals and pest houses, sewers and starch factories, back yards and slop barrels, but also over the public schools. Last week I was in a recitation room with forty young boys and girls; half of them looked sleepy and spiritless. When the class came in, the room was cold and the windows tightly

closed. The stove was filled with fresh coals and the recitation commenced. One girl could not recite for a severe headache; another had not felt well enough to prepare her lesson; half a dozen were coughing; three-fourths of them were afflicted more or less by colds. By this time the stove was red hot. There was no thermometer in the room, but I am confident had there been one, it would have shown an increase of at least thirty degrees in the temperature. There was no water basin on the stove and the air in the room was very dry. The scholars complained of the heat, the teacher had the windows opened, a great flood of air sixty or seventy degrees colder than the atmosphere of the room, came pouring in over the heads and shoulders of those next the window; a half dozen puny pale-faced girls occupied the back seat. In a few moments they were shivering, the windows were closed, the stove reheated and the same process repeated. Thus it goes on from day to day in hundreds of rooms the winter long. Is there no duty here for the physician? The argument is so plain that it is not necessary to pursue it further.

The physician has intimate relations to education in preserving the growing brain of the child from overwork, and his body from underwork and neglect. I believe the time is soon coming when he will be called on to fulfill these relations as he now presides over public hospitals and quarantines. The sooner the day comes when he shall exercise this oversight of the public education the better will it be for child and the after man.

Another very important phase in which the physician of to-day appears as an educator, is in his daily intercourse with his patients. Notwithstanding the great diffusion of medical knowledge of late years, it can not be denied that the majority of men are still woefully ignorant of the very elementary notions of their own constitution and the laws which govern it. Strange as it

may seem that men should be so indifferent about what concern them most, it is nevertheless true. Outside of the medical profession the number of persons is ridiculously small who have a clear knowledge of the relations of the various parts of the body and their functions. They know they have lungs because they breathe, stomachs because they eat, but in regard to how breathing supplies life, or how the stomach acts on the food they are profoundly ignorant. They have doubtless heard of ventilation, but knowing nothing of its philosophy they naturally neglect it; they have read of cleanliness, but being ignorant of the functions of the skin they deem bathing a matter of taste, and not a necessity. And so we might continue the whole catalogue of organic functions parallel with a catalogue of their neglect.

The physician must see to it that this wide spread ignorance is dispelled, this universal indifference broken up. In the discharge of this duty, he will achieve a double purpose. In the first he will divert the mind of his patient from the disease upon which it broods with a morbid pertinacity. He will turn the patient's thoughts to the great truths of physiology, to the chemistry of respiration and digestion; to the great problems of vitality. The patient under a skillful instructor will soon become interested in these things, they will occupy his thoughts and engage his time. Every physician knows the value of thus turning a patient away from himself and directing his thoughts into another channel. Nature is exceedingly careless when she looks at herself, and is very apt to go wrong when engaged in self inspection. In the second place the physician while thus calling the attention of the sick man from his own sufferings, will sow the seeds of hygiene broadcast. Not only the patient, but the friends of him also, and the chance visitor will be instructed.

There was once a cry that the physician could not afford to educate the people, they would learn not only to

take care of their health, but also to do their own doctoring. The doctor would thus be left a pill bagged Othello with his occupation gone; it would be in short, professional suicide. Such a base sentiment could only come from a quack. The physician who is a competent teacher will never lose but gain practice. He will be revered and loved by his patrons, and his good name and fame will be spread abroad throughout the land. Children, and children's children, will rise up to call him blessed. But even were it so, that such teachings would conquer disease and bring in the physical millennium, no true physician would hesitate a moment. Bread and butter with him are secondary things; the primary one right and duty—in the pursuit of these there is no failure, all is honor and reward.

We will consider in the third place, the relation of the physician to higher mental culture. The new psychology which is rapidly supplanting the old system of mental philosophy, has already been spoken of. The mind has been developed with entirely new relations to the body. The old mental philosophy allowed nothing for the brain or body, the system was developed arbitrarily by a certain process of self inspection; the brain was entirely ignored, the rest of the body did not even receive this poor distinction. Of necessity such a system could be nothing but a jumble and mixture of errors in which the terms *science* and *system* were both misnomers.

Here, then, we find the starting point of the higher culture. It is eminently fitting that the only true science of mind should have been developed by the physician. We therefore find the profession now in wholly new relations to our colleges and universities.

The curse of our American colleges—I speak it with all reverence but with most earnest conviction—has been and is religious sectarianism. In the first place this baneful influence has manifested itself in the establish-

ment of a number of colleges vastly greater than could be properly endowed. In the second place the evil has been as great in the selection of the corps of instructors. It is a sad truth, but none the less true because sad, that three-fourths of all the college professors in the past have been chosen because of their religious belief and pulpit power. Not only is the preacher called to be the professor of Moral Science, but he is supposed to be especially fitted for every other department of instruction. The Rev. Sow Air is called to be Prof. of Mathematics, probably because in his pulpit ministrations he represented so many geometrical figures. There is also, a Rev. Prof. of Latin, a Rev. Prof. of Greek, a Rev. Chemist, a Rev. Philosopher, a Rev. Logician, a Rev. Political Economist, and so on to the end. Even the janitor is expected to be able to preach in case of necessity, and from our experience here we would have no doubt of his ability. I believe Harvard is the only college in the United States which is not presided over by a Rev. Dr. of Divinity.

Now I do not wish to be understood as speaking disrespectfully of these worthy men, I value them highly and am only sorry to see them out of place. Of all professional men the preacher has certainly the least knowledge of man, and is therefore least fitted to conduct the higher education of the young. The sacred desk surely does not qualify for the professor's chair. The cultured physician is certainly better fitted by his training, to superintend and conduct the higher education. To him the great problems of mental science present themselves with peculiar force. Man to him is a reality, not a millennial possibility; he doubtless thinks of him perfected and pure, but he does not shut his eyes to what he is.

The physician has studied profoundly physiological action; studied it as it only can be studied, by comparison with disorder and disease. He sees in man not mind alone, but a physical frame most exquisitely formed,

most delicately balanced, with most wonderful relations. Through, by and in this body are exhibited all the phases of thought, all the products of education, all the graces of culture. He knows that practically the intellect and the brain are inseparable. To consider it apart is to pass beyond human perception—as the brain is so is the mind. This is a truth which no one but an idiot or an American college professor would care to deny. But the brain is only a part of the body, its character depends of course much upon natural heritage; but it may be protected, fostered and improved like the lungs or the stomach, but if disease once sets in it is hard to find a mental cod liver oil or an intellectual pepsin.

Thus it becomes eminently proper that physicians should be intimately connected with this high cerebral culture. Studying the peculiarities of each individual student, he could devise plans suited to each case. Knowing the laws of healthy growth he could guard every student from disease. The days of puny students and crazy scholars would quickly pass away, the narrowing influences of sect and dogmas would disappear, men would seek the truth and find it in healthy bodies, brain and minds.

We would not banish preachers from the schools,—under proper direction they might do much good. But we do hope soon to see the day when the teacher of high culture will not only be required to know the science which he teaches, but what is still of greater importance, the mind, brain and body, which are taught.

Lastly, let us consider for a few moments the physician as a teacher in his own profession. Every year thousands of young men are applying for admission as students to private offices and medical colleges. The great majority of them come with an ardent desire to learn, very few of them appreciate the magnitude of the undertaking. The character of the student, and the position he may afterwards obtain, depend much upon the

work of the preceptor, more even than upon the lectures which he may hear in college.

The first thing to be taught is the humanity of his chosen profession. It is not merely a money making business. What he may make out of it should always be thought of as second, not first. He is to go about relieving the sufferings of his fellows, and the true physician feels more real pleasure when he does this than when he receives his fee. To this end he must be taught self sacrifice, taught to forego many of the pleasures of life, taught to endure exposure and undergo fatigue for others. These are the first lessons which the preceptor will be called upon to teach, and they constitute no small part of the preliminary education.

The medical teacher must next develop the studies of the course in their true grandeur. He must teach his pupil that it is not only necessary to learn these things which he will actually need at the bed side, but also to investigate thoroughly the various sciences which bear directly or remotely upon his profession, that he may be always ready not only to heal but also to instruct.

I have thus endeavored to present to the Academy the outlines of a subject upon which I have thought much in the special relations which I have had to education. The more I think upon the subject, the farther I push my investigations into the wants and shortcomings of our schools and colleges, the more am I convinced that we, as a profession, should take a more active part in general education, should hasten to occupy the places for which our peculiar training so naturally adapts us.

In conclusion, I submit these hurried thoughts to the consideration of the Academy.

LETTER FROM GERMANY.

BY T. C. VAN NUYS, M. D., OF WIESBADEN, GERMANY.

Weisbaden, June 21, 1873.

EDITOR OF INDIANA JOURNAL OF MEDICINE:

To-day I attended a meeting of the Nassau Society of Natural Science, and being impressed with the importance of part of the proceedings, I do not think it improper to communicate the same to you, although the subject treated is not medical in character. C. Neubauer delivered a lecture on the "Limit of the Atmosphere." It is universally taught that the atmosphere is limited to about 35 or 40 miles from the surface of the sea. To prove the contrary Neubauer's first experiment illustrated the fact that a current of electricity could not pass through a perfect vacuum—that it could through air a short distance, and through highly attenuated air it could pass a great distance. The air was so rendered by attempting to produce a vacuum in a long glass tube by means of an air pump. The second experiment likewise demonstrated the degree of attenuation which matter can attain. A small quantity of musk, almost imponderable, scented a large room. Neubauer then illustrated the attraction which exists between solids and gases, by placing in a mixture of combustible gas and another which was its supporter of combustion, a small piece of spongy platinum, by the attraction in the interstices of the latter explosion ensued.

To illustrate the diffusion of gases, an earthen cell was sealed, having passing into its cavity the extremity of a U shaped tube. The tube was placed in an upright position and partly filled with mercury. By special contrivance when the space in the cell would increase, causing the mercury in the outer extremity of the tube to ascend, an electrical circuit would be completed by means of a battery—in the circuit, at a distant part of the auditorium, was a bell which would ring as long as

electricity passed through the wires. When contraction in the cell would take place causing the mercury to ascend in the inner extremity of the tube, another circuit of electricity would likewise be completed, and another bell would ring. A large beaker glass was placed over the cell, no electricity passed either of the circuits, as the gases in the cell and beaker had the same proportions. But immediately, when a small amount of coal gas was passed into the beaker, diffusion took place and one of the bells gave the signal that the circuit was complete; a little air blown into the beaker, sufficient to displace the coal gas, and the other bell gave notice that diffusion was taking place more rapidly from the cavity of the cell to that of the beaker. This beautiful experiment illustrates the activity and promptness of the force of the diffusion of gases. If the atmosphere would cease to be gaseous, except the small quantity in the cell, its molecules would separate so as ultimately to occupy places in the great vacuity equal distances one from the other, except being modified to a limited extent by the attraction of solid matter. In this diffusion there would be a consuming of heat, as there would be a change produced in the relation of the molecules.

From these facts Neubauer concludes there is no limit of the atmosphere, that near the bodies of the solar system the atmosphere is more or less in a condensed condition, depending on the relative size of the bodies. There are many other facts to establish this theory which Neubauer did not mention. The laws which govern matter are limited somewhat by its condition. As a solid its molecule have no diffusion and are subject to condensation by pressure; as a liquid its molecules are governed by the laws of diffusion, but can not be condensed by pressure; as a gas its molecules are to the greatest extent subject to condensation equal to the force employed, therefore in this respect unlike the solids. As one ascends Mt. Blanc he very easily perceives the ef-

fects of the partial withdrawal of the atmospheric pressure, but this is no argument against the theory. The greater distance the molecules of the atmosphere are from solid matter, the more are they subject to the force of diffusion. Well may one imagine the eagerness with which Tyndall and Frankland witnessed the burning of three candles on the summit of Mt. Blanc, where respiration is rendered laborious. Combustion was equally as active as at the level of the sea, yet the flames appeared as mere skeletons.

Miscellaneous.

EXTRACT FROM REPORT ON CHOLERA INFANTUM, ENTERO-COLITIS, ETC., IN COLUMBIA HOSPITAL REPORT, BY DR. BUSEY.

For convenience and comprehensiveness I have classified all the cases of non-inflammatory diarrhœa under the head of entero-colitis. In doing this, I feel justified by the additional considerations that the latter is almost invariably preceded by the former, which, from neglect, injudicious, or improper treatment, gradually, and oftentimes imperceptibly, develops the lesions characteristic of one of the more serious forms of disease. Rarely, if ever, does ilietis or colitis mark their inception. Hence, as West says, the distinction between them "is one of degree rather than of kind."

Cholera infantum, so well marked by a group of symptoms, more distinctive in their general array than in their separate and pathognomonic significance and more formidable in their concurrent impressions upon the general system than in the special and solitary effect of any one of them, presents in typical cases, the clini-

cal features of a well-defined disease. The sudden onset of the assemblage of symptoms; their marvelous haste toward decisive and calamitous results; their terrible ravages, speedily expressed in the rapid prostration and exhaustion of the physical and vital powers, would seem to entitle this group to a distinctive appellation. Trousseau, in his graphic delineation of the disease, as it came under his observation, evidently had in view its similarity to Asiatic cholera; yet holding on to the doctrine, so constantly promulgated by him, and which Bouchut also maintains, that diseases owe their characteristic and distinguishing features to specificity, he maintained that the points of dissimilarity are the "evident stamps of specificity." Its infrequency, as compared, with non-inflammatory diarrhœa and enterocolitis; the occasional absence of appreciable morbid lesions, and, when present, their insignificance as compared to the gravity of the symptoms, and its frequent and direct association with dentition, manifestly point to some constitutional peculiarity as an additional determining cause. This suggestion acquires force from the circumstance, believed to have been first suggested by Dr. J. F. Meigs, that in some families there exists a hereditary predisposition to the disease. More than once I have observed that the children of some families suffered from the graver disorder, while others in the immediate vicinity, and apparently living under less favorable hygienic conditions, escaped diseases. The children of some families are never sick without becoming ill.

The influence of lactation, both natural and artificial, in the causation of infantile intestinal diseases, is far too frequently overlooked by the careless practitioner. Milk is the natural aliment of young animals, but the nursing is very frequently fed exclusively upon milk wholly deficient of the necessary nutrient and healthy constituents, and, indeed, often upon it when it is diseased.

In this *resume* of the causes I can not venture to discuss this subject *in extenso*, and might well content myself with a simple reference to the very full and instructive works of Routh on "Infant-Feeding," and Donne on "Mothers and Infants," but I desire to impress the young practitioner with the importance and, in many instances, with the imperative necessity of searching for the cause in the habits, mode of life, and diet of the mother, and in the manner and frequency of nursing the sick infant. It is not only necessary to ascertain that the secretion is healthy in quality and that it comes up to the proper standard in its normal constituents. The deleterious influence, upon the lacteal secretion of sudden bursts of passion, of a nervous temperament, of menstruation and pregnancy, of excessive sexual indulgence, of irregular habits of life, and of certain articles of diet is too well established by clinical observation, if not by chemical analysis, to be considered as mere coincidences unworthy of the attention and investigation of the scientific physician. Dr. Decaisne has recently (London Lancet, September, 1872) shown that insufficient food may occasion very serious and varied disturbances of the quality of the milk.

Without attempting to enumerate, in detail, the long list of causes so universally recognized as contributing to the production of these diseases, I will venture to suggest a few considerations. Whatever may be the influence of bad atmosphere and bad hygiene, something more than an elevated temperature, filthy streets, squalid lodgings, and personal uncleanness is necessary. Neither of the three diseases is peculiar to the children of the poor, or of the habitants of the narrow and foul alleys, or of the dwellers in the illy-ventilated and stinking tenements of populous cities. They invade the palaces of the rich, the fashionable thoroughfares, where dwell the families of leisure and affluence. Nor with all the care and vigilance of the health officer, nor with

the lavish expenditure of the accumulated wealth of the millionaire, can they be shut out from the nurseries of populous cities, however cleanly, comfortable, and luxurious the apartments may be. Nor are they exclusively confined to the illy and improperly fed, to the early weaned, the harshly treated, or the imprudently exposed, for all these causes are, presumably, of as frequent and constant occurrence during the winter as during the summer months; yet it is during June, July, August, and September that the wide-spread epidemics annually occur.

Rare in sparsely-populated localities, rarer still in elevated regions, they are rarest when to these two conditions is added aridity. Occasionally occurring in the farming regions, more frequently in the country villages, as a wide-spread epidemic in populous and compactly-built cities, they become the scourge of infant-asylums and homes for the foundlings and the houseless. Then to the numerous causes of bad air, foul with the exhalations from decaying animal and vegetable matter; to the many improprieties of diet; to the injudicious feeding; to the causes and effects of mal-nutrition; to the elevated temperature and personal neglect, must be added the conditions of moist atmosphere, of lowness of situation, and of the congregation of a number of individuals within a limited area, to complete the series of causes and fill full the measure of endemic requirements. But, after all, these are but coincidence and accessory influences. Numbers, even among those most exposed to these various elements, escape, and the diseases, to a limited extent it is true, do appear where all these conditions of atmosphere, locality, congregation of individuals, privation, and uncleanness are absent. Their nature and causes, like the diseases themselves, are so intimately blended that the physiological and anatomical peculiarities of infancy and childhood must be

studied in order to reach a solution of this complex and intricate problem.

The frequency of these allied affections during infancy and childhood, bearing, apparently, a direct relation with the frequency of the diseases of the nervous system, and their rapid diminution in frequency with the advance of life, corresponding with the lessened frequency of the nervous disorders, point, with unmis-takable significance, to two important factors: age and the physiological and anatomical peculiarities of infancy. Without intending to depreciate the sad effects of the accessory and co-operative influences, bad air, unwhole-some diet, improper exposure, and the numerous other alleged causes, I must insist that an exaltation of nervous irritability and an augmented delicacy of nervous susceptibility, or, rather, that functional and organic derangement of the nervous, or some part thereof, constitute an important element of causation. Trace the history of the disorders through all their varied phenomena, and each objective adds corroboration to this conclusion. The period of life during which the nervous system manifests, with peculiar energy and force, its pathological tendencies, furnishes, by far, the largest of patients. Dentition, with its various nervous excitements, febrile, exacerbations, and local irritations, adds its contingent. Feeble development, with marked nervous irritability, temptingly invites local intestinal disturbances. Residence in the city, none the less so because of the filthy streets, foul exhalations, and densely-populated area, with its constantly recurring scenes of excitement, and its advanced society-regulations, no less detrimental to adult than to infant health, is a fruitful source of nervous as it is of intestinal disorders. Nervous enervation and prostration, so frequently the result of continuous exposure to a high temperature, find their sequences in digestive and nervous disturbances. How marked the contrast! In the

sparsely-populated and elevated regions these disorders are rare visitors to the family nurseries of the country residents, yet growth and development go on. Dentition runs its regular course comparatively free from the reflex and sympathetic phenomena. The sedation of the pure and invigorating country air, of the quiet and physical life of the farming-regions, rather than the exciting, irregular, and stimulating life of the city, is the great preventive of nervous as it is the great curative of the intestinal diseases of childhood. The physique and pathological aptitudes of the young permanently residing in the cities are so markedly in contrast with those of the rural districts that the manner and circumstances of life peculiar to cities, in permanently stimulating functional development, especially of the nervous system, constitute a far more important factor in the causation than the normal physiological and anatomical peculiarities of infancy and childhood.

In regard to diet, I have nothing special to say, beyond giving expression to my firm conviction that milk is the only suitable article. To the nursing natural or artificial lactation, to the weaned a diet of pure and fresh country grass-fed cow's milk. Farinaceous articles and compounds are, at best, miserable substitutes, and frequently injurious expedients. In occasional cases, where milk disagrees, usually because it is poor in quality, badly preserved, or improperly fed, some one of the farinaceous preparations may temporarily supply immediate necessity, but the milk diet should be restored at the earliest possible opportunity. The recent experiments and researches by Dr. Prospero Sonsino, (London Practitioner, September, 1872, p. 155,) if true, clearly establish the fact that starchy aliments are indigestible, in consequence of the absence of digestive power in the salivary, pancreatic, and enteric juices of young animals. This conclusion is corroborated by the facts that milk contains no starchy element, and that the young herbivorous

animals are exclusively nourished upon milk for a limited period. Sonsino's experiments were made by taking from a recently-killed young animal the pancreas, which was hashed and reduced to the consistence of pap. A small quantity of pancreatic infusion, made with distilled water, was dropped upon "the glue of starch," which failed to transform the starch into glucose, thus establishing the condition of physiological dyspepsia in infants for starchy aliments." Fresh pancreatic emulsion, prepared from adult animals, produces transformation almost immediately. The same author asserts that not only are starchy aliments indigestible, but they are deficient in "materials for the reintegration of the principal tissues, which is so necessary to the growing infant."

Dr. Döbell (London Practitioner, October, 1872, p. 234) insists that pancreatic emulsion possesses, also, in a very high degree, the property of promoting the digestion of fats, and thus combining the two properties of transforming starch into glucose and promoting the assimilation of fats, the latter quality being the more valuable, for the reason that starchy aliments, even when rendered easily digestible, are not proper articles of diet of young animals. With children who have teeth, I prefer some form of concentrated animal food—beef-essence or raw beef—to any of the farinaceous articles or compounds. The great and important consideration is to maintain healthy normal nutrition and to prevent supply waste. In chronic cases sufficient and assimilable nutriment is the conservator of life. The indications which pertain to diet, hygiene, and the ordinary conditions of the general management of children being fulfilled, in a large proportion of acute cases little else is needed. Medicine may be a source prolific of mischief as well as a means of cure. Experience has satisfied me, not only of the inutility, but of the impropriety of calomel. Commencing practice with

full confidence in the efficacy of this chemical, I have been driven, by the sad experience of many failures, to abandon, except in occasional cases, its employment. If the morbid lesions are understood and medication is to be based upon the teachings of pathology, surely mercury is contra-indicated. The proneness to exhaustion and waste can not be combated with calomel, for certainly its constitutional operation is to exhaust, to lessen strength, to consume, to depress, to favor all adynamic tendencies. If useful, it is through its alterative, purgative, or cholagogue action. The very nature of the diseases clearly contra-indicates any demand for alteratives, and morbid anatomy has failed to reveal conditions calling for its cholagogue action. As a purgative its place can be supplied, and surely no one will maintain that mercury will correct acidity, arrest serious exhalation from the alimentary mucous membrane, diminish peristaltic action, promote appetite, invigorate digestion, arrest waste, or stimulate the failing powers of life. If neither lesions nor symptoms demand its use, its employment must be empirical. That it will occasionally allay gastric irritability and stop vomiting, when all things else seem to fail, I admit; but is the effect not due rather to its mechanical than therapeutic operation? The failure of remedies to allay gastric irritability is frequently not so much due to their inappropriateness and inefficiency as to their bulk and careless administration. One or two doses may be retained and the third will occasion immediate emesis, not because the medicine is any less effective, but because of the addition to the contents of the stomach. How often it happens that the stomach will tolerate small pieces of ice, or even spoonful of pounded ice, and, so soon as the liquid contents reach a certain bulk, will reject the whole. Mercury, through its diminished bulk, secures what the stomach most needs, rest. That it may possess and exercise some sedative influence upon the gastric

mucous membrane I am not prepared to deny. If so, it must operate locally, and not through the system. Such being the case, I can not comprehend how the very minute quantities given can cover the entire irritated surface of the mucous membrane and thus arrest hypersecretion, or how, when once in the stomach, it can be determined toward its local sedative effect upon remote parts of the intestinal mucous membrane and fail to enter the system, and thus exercise its very injurious constitutional effect. I can not tell how, but experience and observation teach me that mercury does promote increased flow of the biliary secretion, and that the surest way to obtain its constitutional effect is to administer it in frequent small doses. How its local sedative action can be obtained independently of its constitutional and cholagogue operation I can not understand, and do not believe. Take, for illustration, a case of congenital syphilis; give to the patient minute doses of mercury and the constitutional and alterative effects are soon manifest, sometimes before there is any evidence of increased biliary secretion. If the specific action of mercury in the treatment of syphilis be accepted as the criterion by which its *modus operandi* is to be determined, then the conclusion is obvious that its curative value in infantile intestinal diseases is through its action upon the system. The mercurialist must accept this explanation and seek to demonstrate that this alterative action fulfills the indications presented in infantile intestinal diseases.

The indications to be met in the medical treatment are gastric irritability, increased peristaltic action, hypersecretion of the mucous membrane, serous exhalation from the intestinal mucous membrane, acidity, pain when present, exhaustion, loss of appetite, indigestion, and the consequent local lesions. It is important to determine the succession of these phenomena, because effects become concomitant causes. Nausea and vomit-

ing may occur under very different conditions. As the effect of the ingestion of improper articles of diet or of impaired digestion, they usually take precedence of the other symptomatic phenomena. As reflex or sympathetic phenomena they supervene upon intestinal irritation and become continuous with the more marked morbid conditions. Increased perisaltic action, with fœcal discharges, if not co-incident with, is usually consecutive to gastric irritability. Hypersecretion, serous exhalation, and acidity occur subsequently to these conditions, but as a universal law there is no definite order of sequence. Several may occur simultaneously and each become an influence promoting and impelling onward the morbid process; hence the preliminary condition may be concealed by the graver secondary effects; and, as these become concurrent and co-operative morbid conditions, the therapeutical applications must be adapted to combat symptoms as representatives of both causes and effects. Grave inflammatory lesions succeed the lesser and milder effects, though the immediate cause, perhaps the ingestion of some crude and improper article of diet, had ceased to offend because of its expulsion through the anus. Simple looseness of the bowels, expressed either in increased frequency, greater quantity, or loss of consistency of the stools, is a secondary effect, representing some morbid process, and its cure can not be assured simply through removal of the offending foreign substance from the digestive tube or by exclusively attacking the process and act of evacuation. Yet so long as the offending material is permitted to remain in the canal, or the peristaltic action continues with increased frequency and energy, the local lesion, in itself an effect, though operating as a cause, can not be successfully treated. The local morbid condition, in a vast majority of cases, perhaps in all, is some stage of the inflammatory process, varying in intensity and extent from simple irritative hyperæmia to exten-

sive destruction of tissue, manifesting itself in an array of symptomatic phenomena, each one of which becomes an exciting cause. Admitting, for the sake of argument, that hypersecretion may result from functional activity, continuous functional activity will surely produce organic alterations. If to arrest the flux is to cure the disease, why is death so often, especially in the choleraic form, preceded for hours by a partial or complete cessation of the diarrhœa, and why, even in the milder forms, is the diminution in the frequency and quantity of the stools so frequently the premonition of a relapse? Yet it would be worse than folly to attack the inflammatory process with antiphlogistics, while its effects, the manifest phenomena, are permitted to run on with unabated intensity. While the source is being dammed up, the stream of life may run dry. The great principle that underlies the science of cure—the tendency of inflammation toward resolution and health—should not be forgotten or overlooked. Few children die of these diseases before they are consumed. Life feeds so long as there is food to supply its demands. Inanition and exhaustion are the ominous harbingers of death. Waste must be supplied, assimilable nutriment must be furnished, nutrition must be restored. Instead of bringing milk, jostled, churned, watered, and otherwise injured, to the child, carry the patient to the cow, to the country, not to the scantily-supplied and “crowd-poisoned” village or road-side boarding-house, but to the farm-house, where milk, pure and fresh, and air rich in oxygen, and free from the putrid exhalations, can be obtained. These opportunities, perhaps, inure only to the better classes; yet the free and public parks are closed to none. Even the street air is preferable to the poisoned atmosphere of the foul and stinking lodging-room. I have often thought that carrying the child through the streets, washed and dressed for exhibition, to the dispensary building, worked no inconsiderable curative influence, and have fancied

that the cleanly and better dressed were more amenable to medication. To express in a few words both the method of prevention and surest plan of cure, remove the child from the city, away from the immediate and accessory influences; maintain and restore nutrition; supply proper food.

Gastro-intestinal irritability, as manifested by nausea and vomiting, lientery, and augmented peristaltic action, constitute the essential phenomena of the morbid condition. In this connection I can not too strongly urge the importance of securing and maintaining the rest and quiet of the alimentary tract. The symptomatic manifestations of this abnormal irritability are mainly the obstacles to digestion and nutrition. To pour food into, or fill to repletion a stomach which refuses to retain it, or which forces it through the pyloric orifice before it has undergone the preliminary process of digestion, is simply to provoke the extension of the abnormal irritability along the entire line of the mucous tract, and to invite other and more serious disturbances. Usually the gastric irritability is the precedent condition, having its origin in the abnormal irritation of nutriment.

The first indication to be met with medicines is to allay the gastro-intestinal irritability and to quiet the peristaltic contractions. As a sedative, in this condition, I have found no agent comparable to the subnitrate of bismuth. To a child one year old it should not be given in less than five grain doses, repeated every two or three hours, as occasion may demand. Usually I associate it with the *tinctura opii camphorata* or with the *tinctura hyoscyami*, the former being preferable. I believe that the subnitrate is a direct sedative to the irritated mucous surface, and, in the language of another, that it "stimulates, strengthens, and regulates the appetite, confining the bowels, rendering the stools black and depriving them of their fœtor; and, further, that it produces no general symptoms whatever." It may also subserve the

purpose of forming a protecting covering to the irritated surface. Harmless in the absence of any effect upon the general system, it should be given in sufficient quantity, at short intervals, to secure its local sedative influence. But to relieve the spasm, to quiet the peristaltic contraction, no remedy is so certain as opium. With children I prefer the camphorated tincture, because of the minute divisibility of the opium. But to dally with one, two, or three drop doses every two or three hours to a child a year old is simply a waste of time. Watching carefully, to avoid its narcotic influence, it should be given in doses, regulated according to the age of the child, sufficient to produce marked effect upon the frequency of the stools. The greater the flux and the more frequent the contractions the more urgent is the demand for its use. The danger of producing cerebral disturbance, or rather brain-complication, is not more imminent from its proper and judicious employment than consequent upon the exhaustion from an excessive and protracted flux. When nausea and vomiting exist, as is usual in the outset, the aromatic spirits of ammonia has proven a most valuable addition to the bismuth mixture. It is a stomatic stimulant, slightly excitant to the nervous system and antacid, hence admirably adapted to the debilitated state of the stomach.

As a simple antacid the ordinary prepared chalk is preferable to any other medicinal agent. If the acidity is provoked by the nutriment, it should be suspended or rendered alkaline by the addition of lime-water or by a solution of carbonate of soda. The former is preferable when any considerable quantity is required, and can be very conveniently administered in milk, thus subserving a two-fold purpose, correcting the acidity and favoring the retention of nutriment. Milk, as obtained in the cities, even though it may be from a stall-fed cow, should never be given without the addition of an alkali, for it is never free from an excess of acid. For this purpose

I prefer the carbonate of soda. Whatever nutriment may be given should be given in small quantities and repeated at short or longer intervals according to the circumstances of the case. Fullness to repletion provokes nausea, vomiting, lientery, and flux.

Medicines should be given to children in the liquid form, and the physician should order his mixture or solution precisely as he wishes it given. No preparation should be left to the nurse, for they will exercise their judgment and indulge their whims and caprices.

In cases where the treatment with bismuth, as above indicated, has failed, which is more especially adapted to recent cases, I have derived very decided benefit from the employment of the aromatic sulphuric acid, in combination with the officinal solution of the sulphate of morphia. Two to six drops of the acid, with an equal proportion of the solution of morphia, may be given at intervals of three or four hours to a child one year old. The effect of this treatment is sometimes immediately decisive, cases which had obstinately resisted yielding speedily and terminating in one or two days in complete recovery.

In the latter stages of the disease, when there exist manifest evidences of tissue-changes, and loss of continuity, ulceration, and sloughing, recourse must be had to other remedies than those heretofore suggested. Nitrate of silver, sulphate of copper, and the *Liq. ferri pernitrat.* each have their advocates. In occasional cases I seen very marked good effects follow the use of the nitrate of silver; the other two I have very rarely employed, and my experience with them does not justify a repetition. When satisfied of the existence of ulceration, copaiba and turpentine hold out the surest hope of benefit.

In those cases of cholera infantum where the exhaustion is very great and fatal collapse is threatened, as in-

dicated by coldness of the extremities, difficult and laborious breathing, great thirst, lividity of the lips, a feeble and rapid pulse, diminished secretion from the kidneys, great pallor, sunken and pinched features, and cold breath, it is important to produce re-action as soon as possible. The hot mustard-bath is, incomparably, the most efficient means to accomplish this purpose. It may be repeated several times during the day, to maintain a proper and equitable temperature and restore surface-circulation.

Whenever fever is present, a diaphoretic should be employed, the liquid acetate of ammonia is the least objectionable. In the dysenteric form, ipecacuana is often very efficacious.

In thus hastily sketching the treatment, I have intentionally avoided any general review of the subject, preferring to confine myself closely to the observations which the dispensary-practice has permitted.

Proceedings of Societies.

UNION DISTRICT MEDICAL SOCIETY.

REPORTED BY DR. W. HOBBS.

The Union District Medical Society met at the court room in Connersville, Ind., on the 1st day of May, 1873, President Dr. Saunders, of Oxford, Ohio, in the chair. Dr. Pepper, on behalf of the Fayette County Medical Society, delivered an address of welcome to the gentlemen present.

The chair appointed the following committee on business, viz.: Dr. Gregg, of Connersville; Dr. Boyd, of Dublin; Dr. Blount, of Hagerstown.

Dr. D. W. Buter, of Dunreith, was admitted to membership.

Dr. Butler then reported a case of congenital malformation of the intestinal canal and imperforate anus which recently came under his observation, which the meconium and other focal discharges were passed through the urethra. He used the knife on the third day after the birth, but found no bowel; the patient lived eight weeks. The post mortem examination revealed the fact there was but one kidney, and that the rectum was entirely absent. At the sigmoid flexure of the colon there was a sack of considerable dimension, from one point of which there was a narrow passage which entered the urethra near its insertion into the bladder, so that a catheter or probe could by a change of direction, be passed either into the bowel or the bladder. Dr. Butler exhibited the malformed parts. At the autopsy it was discovered that the point of the knife, in the operation for relief, had missed the sack but a few lines, by being directed a little behind it.

The membership from the west at this point arrived, and Dr. Hobbs, of Carthage, was appointed assistant Secretary and Reporter.

Second Order—Dr. Gregg read an elaborate paper upon pneumonia, in which he critically discussed the whole subject, in a manner very creditable to himself.

This paper was followed by an extended discussion of the old and the new, in which were engaged Drs. Gregg, Boyd, Pennington, the President, Falcomer, Moffitt, and Haughton. We are sorry that this occasion will not allow us to present a resume of the paper and the remarks which followed it, but we shall only be indulged to say that the essayist and the discussion warrant us in the belief that the heroic methods by which the lancet, tartarized antimony, and the blister were once relied upon in the treatment of pneumonia, are not now warranted except in special cases.

The more prominent means of value spoken of as the later treatment, are verat, virida, opium, mild cathartics, sul. quinine, and nutrients, and in subjects of enfeebled vital force, stimulants from the first.

Third Order—Dr. Boyd read a paper of great value, upon the effects and use of vesratt viridi. The first point of special note which he made was, that although this drug is so effective a cardiac sedative in small doses, no instance is reported in which any dose has produced

fatal effects. Several instances were enumerated in which what might appear alarming doses had been administered through mistake, yet no serious results followed.

The second point which the paper brought out was, that in those cases in which *verat. virida* produces the most extreme and disagreeable effects, it is usually followed by the most favorable results. This proposition was fully confirmed by the observation of all gentlemen present who spoke to the point.

The third and greater portion of the paper was devoted to the statement of the value of this drug as an anti-convulsive, and especially in the treatment of puerperal convulsions. A number of cases were cited, most of which occurred in the practice of the writer of the paper, in which *verat. virida* were given in drachm doses, repeated every 15 or 20 minutes until the pulse was brought down to 50 or 60 beats per minute. A control of convulsions was obtained beyond what is certainly expected from any other known means. Dr. Blount, of Hagerstown, Ind., spoke of having used it (the tincture) for a similar purpose in 15 drop doses every half hour, and that he had obtained equally favorable results.

The fourth order of business was dinner, which was furnished by the hospitality of the Fayette Co., Ind., Society, and to which the members did ample justice.

At 3 P. M., the Society convened, and heard the fifth order, which was the report of the committee appointed at the last meeting of the Society to examine and report upon the charges against Dr. Hobbs, published in the August, 1872, number of the *INDIANA JOURNAL OF MEDICINE*.

The committee reported that they had, to the extent of their ability, inquired into the truth of these charges, and they conclude their statement as follows, viz:

"Your committee can find no reason to doubt that Dr. Hobbs has acted with courteous and honorable intentions in all his relations to this whole matter, and we therefore fully exonerate him from the charge of professional injustice and discourtesy. In conclusion, your committee is very much gratified to be able to report that Dr. Comingor, in a letter to its chairman, has withdrawn his charge of willful injustice to him by Dr. Hobbs,

and in the same letter takes occasion to express kind feelings for the latter.

CYRUS FALCONER,
S. S. BOYD,
ALLISON B. BRADBURY,
Committee."

The report was concurred in.

Drs. Pennington and Boyd made a supplementary report to that made at last session, of a case of ruptured uterus, but it contained no features not embraced in the proceedings published in the December number of your Journal.

On the last order of business, Dr. Haughton presented a paper upon Thrombosis of the Arteries of the Extremities, with a case, but as this will appear in the Transactions of the Indiana State Medical Society, for 1873, we will not comment upon it, but commend it to the student for careful reading.

The Society then adjourned to meet at Liberty, Union Co., Ind., on the last Thursday in October, 1873.

HAMILTON COUNTY MEDICAL SOCIETY.

At a called meeting of the regular physicians of Hamilton County, Ind., held June 7, 1873, for the purpose of organizing a County Medical Society, there were present Drs. A. L. Pettijohn, A. Pettijohn, Dr. H. H. Stout and Dr. S. Jay, of Deming; Dr. Judd, of Eagletown; Dr. J. I. Rooker, of Castleton; Drs. P. Whitesell and W. H. Pontious, of Clarksville; Drs. F. M. Warford and A. R. Tucker, of Cicero; Drs. N. W. Clark, I. M. Gray, W. B. Graham, E. C. Loehr, I. Haines and W. W. Williams, of Noblesville; Drs. T. J. Smith and E. Lamb, of Strawtown, and Dr. J. M. Barber, of Arcadia.

Dr. A. L. Pettijohn being made temporary chairman, the meeting was called to order and a permanent organization, auxiliary to the State Medical Society, was effected, and the following officers elected for the ensuing year:

President—H. W. Clark.

Vice President—W. H. Cyrus.

Secretary—W. B. Graham.

Treasurer—A. Pettijohn.

Censors—I. M. Gray, P. P. Whitesell, F. M. Warford.

A constitution and by-laws were adopted for the government of the Society, after which the meeting adjourned to meet June 14th, for the purpose of completing the organization.

The Society again met on the 14th of June and continued the work of organizing.

A permanent Committee on Finance was appointed by the chair, viz: Drs. J. M. Gray, W. H. Cyrus and A. L. Pettijohn. Also one on Ethics, viz: Drs. J. I. Rooker, T. J. Smith and W. B. Graham.

Temporary committees on by-laws and fee bill were appointed. The Society at this time stands adjourned to meet on Tuesday, August 12, at 10 o'clock, A. M., at City Hall, Noblesville, Ind. W. B. GRAHAM.

Editorial.

WHETHER the cholera has been in this vicinity or not seems to be as yet a mooted question among physicians—some asserting its prevalence, others denying. It is true that cases reported seem to be confined to the practice of three or four physicians, while others have had no opportunity of judging from personal inspection. But let it be as it may here, we take it for granted, that cholera has occurred in other places—through the south and indeed within the borders of this State—for we have the testimony to that effect of physicians in whom we place the greatest confidence as diagnosticators. It has undoubtedly pursued an erratic course, both as to its travel, appearance, and symptoms, for collapse often occurs without manifest excessive action of the bowels, and it is this fact, more than any other, that cause many to consider the cases as those of congestion simply, together also with the additional fact that when congestion or “collapse” does occur, or is about to take place, the affection of the intestine as shown is that of dysentery instead of diarrhœa. Some name it “conges-

tion of the bowels," others "congestive chill." Again as to its course, it is held to have occurred first in inland places, to have skipped the sea board entirely, and it seems to have been endemic in origin; this, if correct, is contrary to all other visitations of the disease, for before, it could be distinctly traced from its birth place in Asia, and traveled slowly but surely around the world. It is not unimportant to have the question of its identity settled, not only in general but in this locality; but as the matter is at present, physicians should be upon the *qui vive*, and be ready for the first symptom, whether of cholera or congestive chill, for although it may seem early in the year for the appearance of old fashioned fever, we may have a "fulminating" form as a fore runner of that which we have felt certain would, early in the fall, come upon us; the copious rain and luxurious vegetation, than which nothing more marked of the kind has occurred since 1855, will, as heretofore be accompanied or more surely followed by their inseperable companion, fever. Let us be prepared, then if we do find cholera, to find also pure *native* congestion, where "calomel and quinine are the sheet anchors."

At a meeting of the Faculty of Evansville Medical College and Evansville Medical Society, the following resolutions were passed in memory of Drs. Casselberry and Thompson.

The Faculty of the Evansville Medical College met July 9th, 1873, and passed the following resolutions:

WHEREAS, Drs. Casselberry and Thompson have for years past maintained the character of eminent practitioners of medicine, not only from their intimate acquaintance with medical science, but also their skill in the treatment of varied diseases incident to suffering humanity. And

WHEREAS, By their indefatigable perseverance to relieve the afflicted, they present noble examples to the profession, and their decease a great calamity. Therefore,

Resolved, That in their death we sustain a serious loss as co-laborers; and the community, faithful and candid physicians.

Resolved, That we tender their respective families a deep sympathy for their and our loss.

Resolved, That a copy of these resolutions be sent to the families of the deceased.

Resolved, That the Faculty of the Evansville Medical College attend the funerals in a body.

Resolved, That these resolutions be published in the city papers.

At a meeting of the Evansville Medical Society, and other members of the profession in the city, held at the office of Dr. G. B. Walker, July 9th, 1873, a committee consisting of Drs. Day, Morgan, DeBruler, Owen and Polard, was appointed and reported the following resolutions:

WHEREAS, It has pleased Almighty God to remove from our midst two of the members of this society; be it, therefore,

Resolved, That we deeply regret the deaths of our ever kind and courteous fellow-practitioners, Drs. Isaac Casselberry and S. W. Thompson, and that while we sincerely mourn their decease, we fully realize the profession has lost two of its most valued members.

Resolved, That we deeply sympathize with their bereaved families in their great sorrow, and most earnestly desire for them the consolation only afforded by our kind Heavenly Father.

Resolved, That this Society attend the funerals in a body, and that a copy of these proceedings be sent to the families of the deceased brothers, and published in the city papers.

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Original Communications.

REPORT OF A CASE OF PUERPERAL CONVULSIONS.

BY M. F. CRAIN, M. D., ANGOLA, INDIANA.

April 13th, 1873, I was called to see Mrs. R——, aged 21 years; married and pregnant with her first child; pregnancy having advanced to about full term. Found the patient in the semi-recumbent position; pulse about 100 per minute, feeble and irregular; face somewhat flushed; pupils of the eye contracted but partially sensible to the influence of light; severe pains in right side of head; there being however, no difference between the pupils of the right and left eye.

Obtained the following history of case: Patient had been very well up to the night of the 13th. Bowels in good condition and she seemed to be in good spirits. Kidneys active enough, appetite good. To all appearance in good condition for the parturient state. Complained of severe pain in head about four hours before I saw her. She retired, and about one hour and a half before I saw her she had a convulsion which lasted about fifteen minutes. Head thrown back, unconscious, biting of tongue, rigid-

ity of all the muscles of the face, neck, and extremities, with rapid and forcible jerking. About 15 minutes after my arrival, the patient was seized with another convulsion, which was not so severe as the one preceding it. Kept hot applications to extremities and administered bromide of ammonia in doses of grs. x, every half hour until symptoms of convulsions ceased; also in addition to the above, *R fl. ext. gelseminum, ʒiiss; water, ʒiv; teaspoonful every hour until the pulse was reduced to about normal frequency, to which I also added fl. ext. belladonna enough to dilate the pupil of the eye.* The patient had no more convulsions that night. The following day found the patient much better, pulse nearly normal, pupils normal, pain in head very much relieved, and she was resting quietly. I discontinued the belladonna and did not give the gelseminum unless fever should arise. Prescribed pills quinia, grs. ii, every three hours in absence of fever.

April 16th was called to see the same patient; arrived about 9 P. M., and found she was going to be confined, the membranes having ruptured before I was called, that accident occurring before she had much pain. When I arrived the pains recurred every 15 minutes, but were of cutting or grinding nature, which, to my mind, was evidence that the os uteri was undergoing dilation. Upon examination I found the os dilated to about the size of a five cent piece, thick and moist; could not determine the presentation. Pains continued with regularity and increased frequency, and in due time I made another examination and found the os more dilated than before, but it seemed to be very slow to dilate; determined that there was a vertex presentation. The pains now become of such an aggravating character that the patient was unable to lie down or walk about, but sat up in bed supported by her husband. The pains continued with increased frequency and severity, and with them came that pain in right side of the head,

for which I administered bromide potassium in doses of grs. x, and repeated every half hour or hour, as necessary to relieve the pain in head. Labor progressed slowly and without accident until about 4 o'clock, A. M., when I noticed symptoms of return of the convulsions. I immediately sent for my partner (Dr. Rice) for counsel. Dr. Rice is a man of large experience, having been engaged in the active duties of his profession for about 16 years. He arrived about 8, A. M., at which time she was almost unconscious. The head of the child was pressing upon the perineum and the pains occurring almost without intermission. The child was born about 9, A. M., and about 20 minutes before the delivery, patient had another convulsion. The child was a large healthy male; the placenta was thrown off almost immediately.

After paying proper attention to both parent and child, we were preparing to depart when the former was seized with another convulsion, which was so severe and lasted so long, that we administered chloroform, by inhalation, until the patient could swallow, when we gave R hydrate of chloral, ℥iv ; water, ℥ii ; one teaspoonful every 15 minutes until relief was obtained. After about half an hour she had another convulsion, which was longer and harder than any preceding one. Continued the above treatment and she had no more convulsions.

I remained with her until the following day. After the last convulsion she remained in a semi-unconscious state until the next morning, when she, for the first time, expressed a desire to see the child; prior to that she did not seem to realize that she was a mother. About 8 hours after the birth of the child there came up symptoms of inflammation, the abdomen becoming distended and tympanic, with extreme tenderness and pain; the pulse came up rapidly; the face flushed, and extreme thirst. Prescribed, R fl. ext. gelseminum, ℥iss ;

water, ℥iv ; gave one teaspoonful every hour until pulse becomes normal. Continued bromide of potassium for fear of return of the convulsion. Applied warm fomentations to the abdomen and gave an opiate, in the shape of morphia, as necessary. The following morning, (the 18th), she was some better; abdomen not so much swollen or tender; pulse reduced in frequency and lochial discharge free. She was perfectly conscious, but was suffering pain from distention of bladder. Dr. Rice, with some difficulty, introduced the catheter and drew off a large amount of urine to the immediate relief of the patient.

From this time on the patient made a rapid recovery, and has been healthy ever since. I might say, however, that we gave her tonics, such as quinine, iron, and calisaya, for some time after she began to convalesce. The patient living in a malarial district, and upon the bank of a small river surrounded by marshes, with a strong tendency to chill and fever, was sufficient indication for such remedies, in my opinion.



RUSH MEDICAL SOCIETY—TRANSACTIONS JULY 7TH, 1873.

REPORTED BY WM. A. PUGH, M. D.

Report of Case, Amputation of Female Breast.—At the last meeting, on the first Monday in July, of the above Association, Dr. M. Sexton reported a case of cancer of the female breast, with the operation for its removal. Reporter did not claim that he would present any new views in reference to the pathology or pathogeny of the disease, but that he wished to impress upon the members the great importance of an *early interference* with tumors of known malignity. It was his intention to discuss the practical more than the scientific bearings of his subject. The tumor under consideration, had been

one of unusually rapid development; and although the patient was possessed of a very vigorous constitution, it had made rapid inroads upon her system, and was marching on to a speedy and fatal issue.

The removal of the diseased mass was accomplished by the usual incisions and the general management; of dressing, diet, regimen, etc., nothing different from that laid down in the general principles of surgery. The patient made a rapid and seemingly a complete recovery in less than two months. The points made by the reporter were:

First—the liability of the disease returning. He said: “The substance of our opposition to surgical interference with cancer, based on scientific ground, is, that the disease *will return*: that however carefully it may be removed, however complete the operation, it will re-appear at the original site, or elsewhere in the body; in short, that the surgeon’s knife can not eradicate from the system the cancerous vice. It would be idleness in us to deny the truth of this objection, or to attempt to evade its full force. No honest, intelligent surgeon ever attacked a cancer with knife, or cautery, with the full assurance or belief that it would never return. It is with the hope rather, that the morbid condition of body which results in the changed deposit or structure denominated cancer, may for a time, perhaps always, cease to operate. Hence the unfortunate patient is notified of the probabilities, and no false hopes are encouraged.

It is a *fact*, that under *any* of the various systems of treatment—which accomplishes the removal of the heterogeneous growth—*cures* are effected; that is to say, the subjects live, as far as can be told, free from this specific disease and die from other maladies.

No fact in conservatory surgery, is better established than that this very operation (which we have just reported) prolongs the life on the average, two years. ‘This of itself fixes, or should fix the status of the operation.’”

Too long delay in the use of the knife was strongly condemned. Patients will "hug the delusive phantom of hope," and are induced to put off the evil hour, until the system is involved in the diseased action, when relief from an operation, or in fact any kind of interference, is worse than hopeless. In this, as in almost all radical means of relief, early and prompt interference is absolutely essential. If these radical and prompt measures are instituted at an *early period*, reasonable hopes of a cure may be entertained, and if the cure is not effected a prolongation of life may certainly be looked for.

Second—The author maintained that surgical interference was justified and proper, even in an advanced stage of the malady, simply for the relief of pain. He gave instances where he had been the instrument of relieving the sufferer from intolerable anguish by removing the morbid development, as we are justified in performing gastrotomy, for the purpose of introducing fluids into the stomach of one in a "hell of thirst," whose œsophagus is mechanically obstructed. So in these cases we are to adapt measures, even extreme measures, for the comfort and temporary relief of our patient.

The Doctor condemned "*in to-to*," the catalogue of mild means usually resorted to, such as blisters, inunctions, plasters, liniments, etc., as being of no use, if not positively injurious, contending that, if extirpation be not admissible that they be let "*severely alone*," and that a course of "masterly inactivity" is the only prudent and wise one to be adopted. Sometimes our art is brought into disrepute by operations performed at so late a stage in the malady. This is very *often* the case, but quite as often it turns out that our efforts are crowned with success. Instanced one case where his patient died in twelve hours, and another equally helpless one where almost entire relief was obtained and the subject lived fourteen months, finally dying from a development of the malady in another region of the body; but whose

life was one of comparative ease and comfort after the operation. We have to take risks in these extreme cases, and because now and then we are unsuccessful, it should not deter us from known or supposed duty when circumstances present themselves requiring coolness of judgment, intrepid purpose, or skill in our art.

These patients often present themselves to us "*in extremes*," and it is clearly our duty to give them all the relief our science affords. They *will have* treatment from some one, if not by a regular physician, by charlatans and pretenders, who submit them to all the tortures of the rack, or the burnings and pains of the faggot. The conscientious and humane surgeon is the one, and the only one, who should guide and direct them in their extremities.

"Does cancer ever spontaneously disappear?" Fifteen years since, the brother of the lady mentioned in this report, then a lad of fifteen years, was presented to this Society for examination, for a diseased mass lying in contact with, or perhaps growing upon one of the ribs, just below and behind the nipple of the left breast. The growth was diagnosed by every member of the society, the reporter amongst the rest, to be malignant. To the sight, the touch, its general physiognomy, its outlines, radiating pains, bluish appearance, enlarged veins, elevation above the surface, and in fact everything connected with it, led all to believe that it was malignant.

The young gentleman was examined by the elder Dr. Mussey, who confirmed the diagnosis, but recommended the advice given in this body, that it be "severely let alone." In progress of time the disorder disappeared, under simple water dressings, and the patient is now a man in the full vigor of life. It is not at all an impossible, nor an improbable thing, that cancer sometimes gets well spontaneously. "The disappearance of many uterine tumors proved cancerous, without surgical treatment, has given rise to the belief that, in some way, the

constitutional action being changed, the menstrual flow has proved curative."

In conclusion, the Doctor referred to the late "Condu-rungo" excitement, wherein the whole medical world was inspired with the vain hope that a constitutional remedy had been found for the prevention and cure of this curse upon the human race. It, like all other specifics had failed to do the work, and we were compelled to go back on the old time-honored and time-tried remedies, ineffectual as they may have been.

Arsenic was also referred to as a constitutional agent for the cure of cancer; but no statistics or results, could be adduced in its favor.

DISCUSSION.

Dr. Arnold, Sen., said, he entirely agreed with the sentiments expressed in the paper. Cancer was certainly amenable to treatment if the means at hand were applied in a timely and vigorous manner. Delay was dangerous; fatal to the patient, and fatal to the reputation of the surgical art. We waited too long. His practice was, to advise the removal of all tumors of a suspicious character; giving his patients the benefit of the doubt. From an experience and observation extending over thirty years, he had come to the conclusion that surgeons, as a general rule, were too timid in proceeding at once to extirpate growths of known malignancy or of a suspicious character—age, constitution, habits of life, etc., always being taken into the count. He thought the profession had been direlict in duty, under the old doctrines that "cancers were incurable, and should be let alone." It is time that we were taking a step forward, in particular. Certainly the old practice of letting alone has nothing to encourage us in results. He hoped the day of inactivity and do nothing-ism was past.

Dr. Pollett, did not believe a case of cancer was ever cured, either by surgical interference, constitutional remedies, or any other way. Thought that it was a con-

stitutional, and not a local disease: and that you could not amputate, remove by cauter, or in any other way get rid of a vice which so affected the constitution as this. Two things were never cured—consumption and cancer.

He had no means of diagnosing a cancer until full constitutional symptoms had set in, and it was then too late to do good. If it had a suspicious growth, advised to let it alone. If it got well he concluded it was not cancerous or malignant; if they died it was *prima-facie* evidence that it was malignant and should not have been interfered with. Surgeons were in the habit of using the knife or the cauter with entirely too much freedom. It was a dangerous, and in his opinion, a bad practice, and could not be too highly condemned. It might be he was an old foggy; but if to condemn interference with suspicious or malignant tumors was old foggism, he would have to rest under the imputation. Did not think cases cured and called cancer were cancers at all—they were something else.

The Doctor then related three cases which had come under his observation, and upon which the knife had been used, all proving fatal. These led him to the conclusions he had come to, and announced to day. Better let them alone and we will save our patients a world of suffering and torture.

Dr. Thomas could not agree with the gentleman last upon the floor. If his reasoning were adopted, we could arrive at no conclusions in reference to diseased action until it was too late for our art to afford relief. In cases of fever and other maladies, we often had to combat symptoms, relieve suffering organs, assuage pain, quiet nervous manifestations, before the grave and hopeless symptoms presented themselves. It is bad logic at any rate to say that if a patient should recover from suspicious growth upon the body or extremities, that was not malignant, and if another with precisely the same kind

of surroundings should die, and that therefore it was malignant. False premises bring us to false conclusions. Results of treatment must be predicated upon known facts. It is too broad an assumption to say, if results be occasionally bad in a given line of treatment, that therefore the malady is incurable and should be let alone.

Dr. Moffett.—My mind has, in the two past years, undergone a great change in reference to the management of such cases as we have under consideration to-day. If I understand the matter correctly, pathologists and microscopists, have not reached the point where they can with certainty diagnose a cancer cell, although it has been claimed that such discoveries had been positively made. We therefore, are in a great measure compelled to rely upon the old methods of,—“Physical Diagnosis,” so to speak—this is, sight, touch, physiognomy, location, etc. We should educate our senses in this matter and thus be enabled to arrive at correct conclusions. These are matters that must not be ignored, even though science proposes to do much more for us. Scientific research is still in darkness and doubt, but day seems to be dawning upon us and we must work on and hope on. As I said before, my mind has undergone a change, and it has been observations I have made in this time that has caused the change. I am now satisfied that the old doctrine of “let these suspicious tumors alone,” was a pernicious one. We must, as advocated in the paper, interfere early, and thus give our patients the benefits which surgery really holds out to them. Medicine is a thing to be done, and especially surgery is a thing to be done by ourselves; we can’t substitute any one to do it for us, consequently we should at all times and under all circumstances, hold ourselves in readiness to act promptly, especially in such cases as we have under consideration. I had something to do with the patient reported upon, and I am more than gratified at the result. Even if the disease should return, she has been more

than compensated for all she has undergone—she has at least been freed from torturing pain and anguish of body, and distress of mind.

I might go on and relate instance after instance where the same result had followed. We must not let our fears overcome our judgment of what is right; we must be bold, but judicious; we must be fearless, but cautious. The sentiments expressed by Dr. Pollett, will not do for our guide. We can diagnose, with much certainty, the nature of tumors before the constitutional symptoms set in, and just here is the time for us to show our skill, and sustain the profession which we follow. I am glad the case has been brought before us. I heartily concur in the doctrines set forth by the reporter—an early interference; operate to cure, operate to relieve pain, operate to prolong life.

Dr. Stevens, of Indianapolis—I must say, gentlemen, that I have been highly entertained by the paper, and more especially by the discussion; fresh thoughts on the subject of operative procedure in cancerous affections, have been awakened in my mind. In reference to it being a constitutional difficulty alone, as advocated by Dr. Pollett, we might ask what he really means by a constitutional affection? If he means that cancer cells are generated in the blood, and that these tumors are the local manifestations thereof, it would be idle to institute any surgical interference. If he means that the tumors or morbid growths are first formed, and then the cells carried through the circulation, thus poisoning the system, surgical interference at an early day would clearly be the duty of the attendant. Or, if he means that the effects of these morbid growths, is, to impoverish the system in its blood making powers, or in any way producing debilitating effects, we should, at the earliest possible day, institute measures for the removal from the body of the offending cause. The doctrine of early in-

terference is certainly the true doctrine, provided the surrounding circumstances will at all justify it.

SUMMARY.

Dr. Sexton—If the doctrine advocated by Dr. Pollett were true, our hands would in a measure be tied, and the largest number of cases would have to go unrelieved, unmodified, and unassuaged, to a speedy and miserable death. We are justified in our surgical interference, though but a small portion of our cases may be benefitted thereby. Am glad to see the interest manifested by the Society in the report I have just read, and hope it may be for our mutual benefit and redound to the good of our patrons.

MICHIGAN STATE BOARD OF HEALTH.

The State Board of Health met at the Supreme Court room in the city of Lansing, July 30th, 1873, at eight o'clock A. M. Present Dr. H. O. Hitchcock, Kalamazoo, Dr. Z. E. Bliss, of Grand Rapids, Dr. R. C. Kedzie, of Lansing, Hon. J. S. Goodman, of Saginaw.

Dr. H. F. Lyster, of Detroit, and Rev. O. H. Bingham, of Ann Arbor, were unable to be present.

Dr. H. O. Hitchcock was appointed temporary chairman, and Z. E. Bliss was appointed temporary secretary.

Dr. H. O. Hitchcock, as temporary chairman, read the following address:

GENTLEMEN—In accordance with the request of the Governor, I have asked you to convene at this time in order that at the earliest possible day the Michigan State Board of Health might be organized and ready for its work. I trust it may not be considered impertinent for me to suggest an outline of the work, that seem to me to have been laid upon us.

For years some of us have been laboring earnestly for

the establishment of such a Board in this State. The arguments for its establishment are many and weighty and words free and earnest with which we urged it. As it is far easier for most people to show that something ought to be done, than definitely to point out what that something is, to lay burdens upon other's shoulders than to assume themselves, so we found real pleasure in urging the preparation of a burden for somebody's shoulders, not stopping to think "what if it should be let down upon *our own*?" And I imagine that each one of us received a little shock one day, and for a time at least an abatement of his zeal in the cause of preventive medicine, when our good Governor gently laid upon us his hand and the burden of making a State Board of Health, popular, because useful to the people of the State. Here, then, we are to-day, face to face with the question, what is the work to be done by this State Board of Health, and how are we to do it? People are accustomed to look upon the loss of life and treasure in time of war as something fearful to contemplate, one of the greatest calamities of the State. And the whole story of the State's loss by war is not told in the number of lives and the amount of treasure destroyed, but society is demoralized, families broken up, marriages and births are prevented, the constitutions of many of the young men are broken by the hardships of the field or the hospital, and they are thus disabled to the State, and many of them transmit to their children enfeebled constitutions susceptible to disease, thus securing that the race, so far as they are concerned, shall soon run out.

War with all its attendant calamities, destruction of life and property, demoralization of society, and its tendency to the extinction of the race, can and ought to be averted, and that ruler and those legislators and citizens who, by diplomacy, wise and liberal legislation, the broad and general education of the people, enable a na-

tion to avoid it, are cherished and honored while they live, and are crowned as benefactors of their race and the world. But war in which this State has materially suffered has occurred but once in the thirty-six years of her history as a State, and has therefore brought to her an average loss for each of those years of only about six hundred men, and in round numbers about \$500,000 in treasure; whereas, during those very four years of war, and each preceeding and succeeding one there have been, preventable causes of disease and death silently at work that have cost the State far more in lives and treasure. According to the vital statistics of 1870 it appears that from the four principal causes of death this State suffered a loss for that year of 3,284 lives. Is there an observant and thoughtful physician who does not believe that by the intelligent observance of all the known principles of hygiene, more than one-half of the deaths occurring from consumption, scarlatina, typhoid fever, and diarrhea may be prevented, and thus there may be yearly saved to the State 1,642 lives that are now lost from these four causes alone? And what man is there who has given any attention to the subject but is fully aware of all the deaths occurring in the State from all other causes —7,482—there might have been prevented, to say the least, 358? Thus, at a low estimate, there might be saved to this State, if the people were properly instructed in and would carefully observe the principles of hygiene, 2,000 lives that are annually sacrificed by ignorance and neglect. For every case of death it is estimated that there are twenty cases of sickness which, in loss of time, medical attendance, nursing, etc., cost on an average \$50 each. Thus the State loses in treasure by preventable sickness \$2,000,000 per annum, to say nothing of the cost of burying the dead. But the whole of the detriment of the State is not found in the loss of the cost of the sickness and deaths that may be prevented; but a far greater detriment is to be found in the

prevention of marriages and births of children by the sickness and death of those who would otherwise become parents, and especially in the enfeebled constitutions and inheritable disease entailed upon many children by diseased parents, thus imposing upon the race a tendency to run out. Here, then, is the work for this Board to do—to educate the people in respect to the nature and causation of disease and the means for their prevention; to suggest appropriate legislation for compelling, when necessary, the use of those means, and to present arguments for such educational legislation, fortified and made cogent by facts, well authenticated cases of disease and death, directly traceable to ignorance, neglect of disobedience of the laws of hygiene, and to make it possible by this work that many if not all of the lives and much of the treasure now necessarily lost to the State may be saved. There is in the medical profession a whole army of noble, devoted men engaged in a hand to hand fight with our great enemy, disease. All honor to their work. But our work must not be confounded with theirs, and our reports must not seek to be receipt books, mere guides to the *cure* of disease. But our Governor has made us the advanced guard of this army—placed us on this advance picket line—that we may give warning to the very first approach of the enemy; indeed, that we may go as scouts into his very camp, and, learning all the secrets of his strategy, may there strip him of his power by taking away the very pabulum on which he feeds.

We are indeed a small band to man so long a line, and we must call to our assistance by free and cordial correspondence all physicians throughout the State who are interested in the principles of hygiene. We must be ready to point out the influence of topography, geology and climate of the various points of our State upon the health of its citizens; the importance and intimate relations of drainage and sewerage to the health

of families and whole communities; to call the attention of the people to the influence of various kinds of occupations, food, drinks and clothing, as well as the structure of their public and private buildings, upon the development of certain forms of disease; and most of all to point out the vast importance to the welfare and the perpetuity of the State of properly rearing, training and educating the young, and to point out the nature and causes of epidemics, endemics and contagious diseases and the means for their eradication. For success in such a work, along this whole line, well organized effort, based upon patient, intelligent research, is essential. I bespeak from every member of this Board harmonious, earnest, faithful, though *unpaid* labor in this cause, and I am sure there will follow victories of grander proportions and of broader and more vital interest to mankind than any that have been or may be achieved in medicine as a strictly healing art. In the words of one, who I venture to hope will be chosen the Secretary of this Board, "grander victories of greater importance to the people remain to be achieved than any which have heretofore resulted from would-be methods." "To the peaceful hero who shall call forth and so marshal facts and generalize the scattered forces of knowledge as to lead to a victory over any one of the prominent causes of death which now annually destroys our citizens by hundreds or by thousands, humanity may well accord a higher praise than to the most successful of warlike generals."

Gentlemen, I welcome you to this work, grand, self-sacrificing and sublime.

After the presentation of commissions of appointment from the Governor, by each member present, the Board proceeded to the election of a permanent Secretary. Dr. H. B. Baker, of Lansing, was elected. Dr. H. O. Hitchcock was also elected President of the Board.

The following standing committees were appointed.

1. On epidemic, endemic and all contagious diseases—Dr. Z. R. Bliss, chairman.

2. Sewerage and drainage—Dr. H. F. Lyster, chairman.

3. Foods, drinks and water supply—Dr. Z. E. Bliss, chairman.

4. Disposing of excreta and decomposing organic matter—Dr. H. O. Hitchcock, chairman.

5. Poisons, explosives, chemicals, accidents and special resources of danger to life and health—Dr. R. C. Kedzie, chairman.

6. Occupation and recreations—J. S. Goodman, chairman.

7. Education—the relation of schools to health, the kind and methods of instruction in use and methods proposed—J. S. Goodman, chairman.

8. Geology and topography; influence on health of forests and their removal, shade trees near dwellings etc.—Charles H. Brigham, chairman.

9. The death rate as influenced by age, climate and social condition—J. S. Goodman, chairman.

10. Legislation in the interests of public health—Dr. R. C. Kedzie, chairman.

11. Finance—Z. E. Bliss, chairman.

These standing committees consist of the chairman named, the President, and the Secretary of the Board.

By-laws were presented and adopted, the time of the meetings of the Board was fixed upon, viz, the second Tuesday in January, April, July and October of each year, at nine o'clock A. M. Special meetings can be called at any time and place by the President.

After the transaction of considerable other business the Board adjourned.

FOUNTAIN AND WARREN MEDICAL SOCIETY.

The Society met pursuant to call, at the Mayor's office in the city of Attica at 10 o'clock, A. M., July 17, 1873. The President occupying the chair, the following members being present: Dr. McElwee, Dr. Justin Ross, Dr. Watson, Dr. Wilson, Dr. Page, Dr. Pierce, Dr. Moore, Dr. J. W. Quinn, Dr. M. T. Chase, Dr. Lyon.

The Secretary not being present, Dr. M. T. Chase was appointed to act *ad interim*. Dr. Watson made a verbal report of the proceedings of the last preceding meeting.

The names of the following gentlemen were proposed for membership: Dr. J. F. Leach, of West Lebanon, Dr. R. W. Smith, of Williamsport, Dr. C. E. Lamon, of Attica, Dr. E. K. Kellenbergher, of Attica, Dr. D. S. Reid, of Attica.

The board or censors not being present, the following gentlemen were elected to act upon the present occasion: Dr. C. D. Watson, Dr. Leach and Dr. Lyons.

The following candidates being graduates were admitted without examination: Dr. Leach, Dr. R. W. Smith, Dr. C. E. Lamon, Dr. E. K. Kellenbergher and Dr. John S. Riffle. The application of Dr. Reid was not acted upon, in consequence of his not being present.

Dr. Chase moved that educated dentists shall be eligible to honorary membership, seconded by Dr. Moore. The motion, after some discussion was withdrawn by consent; the subject of honorary membership received a very full and spirited discussion, but no definite action taken as a decision of the subject.

Upon motion of Dr. Case seconded by Dr. Leach, E. D. Purviance was elected as an honorary member. The President now declared the discussion of the preamble and resolutions, as laid over at the last meeting, to be next in order to-wit, as follows:

Whereas: It is the imperative duty as declared by the American Medical Association, of every Physician, to be a member of some local Medical Society; and where-

as, the present requirements of this society are not too high to admit as members all practitioners worthy of association with us in consultation. Therefore be it

Resolved: First.—That all such practitioners within the territory included by our Society be urgently invited to present themselves as candidates for membership, and

Secondly:—All who shall fail to unite with us on or before the second Thursday in April, 1874, being the day of the annual meeting of the Society, shall hereafter be debarred from the privilege of consultation with the members thereof.

Pending the discussion of these resolutions, the Secretary arrived, and after making proper explanation of the circumstances which had detained him, proceeded by permission, to read the minutes of the previous meeting, which were adopted by general consent.

The discussion of the resolutions being resumed, the subject was fully canvassed, and upon the vote being taken, the resolutions were adopted *nem. con.*

AFTERNOON SESSION.

Two specimens of *Trichinæ Spirilas*, obtained from T. H. McAllister of New York were exhibited by means of two compound microscopes.

The subject of discussion, Cholera and its conditions, being called up, it occupied the attention of the society for two or three hours. The discussion was both interesting and instructive, nearly every member present taking part therein, and it is confidently believed that in event of a visitation of this scourge, the subjects of it will be benefitted by the discussion of this disease and its proper treatment.

On motion of Dr. Smith, the President was authorized to appoint essayists for next meeting.

Dr. Page was appointed to present a paper on Cholera Infantum, Dr. Case to read a paper on Purulent Collections in the thorax, Dr. Leach to present a paper upon Puerperal Fever.

On motion of Dr. Riffle, the Secretary was required to furnish reports of the proceedings to newspapers pub-

lished within the territory included by the Society, and on amendment offered by Dr. Watson, to the Indiana Journal of Medicine, also, on motion, a vote of thanks was declared to the city authorities of Attica, for the use of the Mayor's office upon this occasion; also to Mr. J. L. Hayes for a water cooler full of iced lemonade.

On motion, the Society adjourned to meet at Williamsport on the second Thursday in October.

SAMUEL J. WELDON, Sec.



CASS COUNTY MEDICAL SOCIETY.

Many of the Physicians of Cass county assembled in the Court House in Logansport on Wednesday, June 25, pursuant to notice, for the purpose of organizing a county Medical Society. Dr. Bell called the meeting to order, and Dr. Justice was elected temporary chairman, with Dr. Goodell temporary Secretary. The object of the meeting was stated by Dr. Bell.

A committee on business was, on motion, appointed, who reported an order of exercises, which was then taken up.

Drs. Coleman, Adrain and Thomas, the committee on permanent organization, reported the following offices to be filled by ballot, viz: President, Vice President, Secretary, Treasurer, and three Censors.

Drs. Faber, Bell and Washburn, the committee on constitution, reported a code, which after some discussion, was adopted.

The officers for the ensuing year were then elected: Dr. J. A. Adrain, President, Dr. Wm. H. Bell, Vice President; Dr. J. H. Goodell, Secretary; Dr. J. M. Justice, Treasurer; Drs. A. Coleman, J. B. Washburn and Jas. Thomas, censors.

Dr. Justice tendered his thanks to the Society for electing him temporary chairman, and introduced Dr. J.

A. Adrain, President for the coming year, who made a fine speech on the effects of associated effort, and hoped the examples he had adduced would be incentive to more earnest work in our profession.

The following gentlemen came forward and signed the By-Laws: S. A. Adrain, Logansport; Wm. H. Bell, Logansport; J. H. Goodell, Walton; J. M. Justice, Logansport; Jno. Wilds, Logansport; J. B. McKelvey, Curvton; G. W. Nafe, Big Indian; Jno. Herrmann, Logansport; R. Baber, Logansport; Jas. Thomas, Royal Center; J. V. Hass, Logansport; I. B. Washburn, Logansport; Ben C. Stevens, Logansport.

The Secretary was instructed to have the proceedings published in the Logansport papers, the Chicago Medical Examiner, and the Indiana Journal of Medicine. The Society then adjourned, to meet third Wednesday in November.

J. H. GOODELL, Sec.

Reviews.

MEDICAL COLLEGE OF OHIO, fifty-third annual announcement; Cincinnati.

THIRTY-SECOND ANNUAL ANNOUNCEMENT OF the St. Louis Medical College; winter session 1873-4.

VASSAR COLLEGE—Its foundation, aim, resources, and course of study, May, 1873.

MEDICO-LEGAL STANDPOINT, as regards homicide, etc., by Henry F. Barns, M. D., Louisville, Ky.

UNIVERSITY OF NASHVILLE DEPARTMENT OF MEDICINE and Surgery, the twenty-fourth annual announcement for the Sessions of 1873-4, with a catalogue of graduates in 1873.

A REPLY TO DR. H. C. WOODS, "Review of the medical testimony in the trial of Mrs. E. G. Whorton, for the alleged attempt to poison Mrs. Van Ness," Dr. Philip C. Williams, Baltimore, Md.; reprint from the Richmond and Louisville Medical Journal, 1873.

We have not yet examined this "reply," but will notice the points enclosed at a subsequent period.

THE SANITARIAN—A monthly Journal, A. N. Bell, M. D., editor; A. S. Barnes & Co., New York and Chicago.

This journal is devoted to sanitary science, and if continued in the style and spirit that the two first numbers appear in, it will be worthy of perusal by all. We have needed something of the kind for years.

CLINICAL NOTES OF NERVOUS DISEASES OF WOMEN, by Wm. B. Neptil, M. D.; reprinted from Dr. Brown Sequards archives of science and practical medicine, Nos. 3, 4, and 5, 1873: by P. Putnam's Sons, New York.

The subjects treated of here are vaginismus, dysmenorrhœa, and "backache." It is well worth a careful perusal.

PHARMACEUTICAL LEXICON, a Dictionary of Pharmaceutical Science, containing a concise explanation of the various subjects and terms of pharmacy, with appropriate selections of the collateral science, designed as a guide for the Pharmaceutist, Druggist, Physician, by H. W. Swedinger; Lindsey & Blackiston, Philadelphia; Cleland & Cathcart, Indianapolis.

The pharmacist should not be without this work, it will assist him when in haste and inform him at all times.

THE STRICTURE OF THE URETHA, results of operation with the dilating urethrotome, with cases, by F. M. Otis, M. D., Clinical Professor of Genitourinary diseases, College Physicians and Surgeons, New York; D. Appleton & Co., New York.

This is a collection of cases showing the value of the instrument named in bonds of adhesion, which the author holds to be the cause of persistent discharges from the urethra, the said instrument is an invention of his own.

LAW AND INTELLIGENCE IN NATURE, and the improvements of the race in accordance with law, by A. B. Palmer, A. M. M. D., professor of Pathology and Practice of Medicine in the University of Michigan, and Bowdoin College.

This is an address made by Dr. Palmer to the State Medical Society of Michigan, of which he was President; the address seems to be a fair production. The doctor, as far as we have examined, is "orthodox," and holds to well established views of the scientific profession.

SPEECH OF HON. JAS. E. STEVENSON, of Ohio, delivered in the House of Representatives, February 26, and March 1, 1873. An exhibit of Credit Mobillier legislation and operation.

This to those interested in *Credit Mobillier* matters should be an interesting document, and although we confess we are not opposed to the principle *per se*, and do not enter heartily into the spirit of opposition which has of late prevailed against Oaks Ames' operation, holding it proper for congressmen and any one else to take stock for the honest purpose of aiding internal improvement, yet no doubt Mr. Stevenson gives us facts which are of great interest, and should be carefully considered.

FISTULA, HEMARRHOIDS, PAINFUL ULCERS, STRICTURE Prolapsus, and other diseases of the rectum, their treatment and diagnosis, by William Allingham, Fellow of the Royal College of Surgeons of England; second edition, revised and enlarged; Lindsay & Blackiston, Philadelphia.

We have again to repeat that such work as the present, fully discussing special subjects in a minute and exhaustive manner, is what the profession needs. The disease of the rectum, is a subject that has been too much ignored, considering their nature as set forth in the present treatise. No one but he who has specially examined such diseases and had a large experience therein, could give such material as this. Cooper and Brode once touched upon it, but we consider Dr. Allingham's work, brought up to our present state of knowledge, as about the only one that can be relied upon for minute reference.

MEDICAL AND SURGICAL HISTORY OF THE WAR, the Rebellion, part 1st, Vol. 1 and 2, War Department, Surgeon Generals Office, Washington, D. C.

These two volumes of historical record, comprising the record of about six and a half million of cases, is something as to completeness purely American, for although France and England may have worked up in somewhat the same plan, their records are meagre and unsatisfactory in comparison. Many cases of great interest in a surgical and medical light will here be found, "hair breath escapes," miraculous recoveries, the proof of the power of medication, as well as the fostering and inherant form of nature in repairing injuries. There ought to be a large edition of the work published, and we hope congress at next session will make suitable appropriation for that purpose. The work was issued under direction of Surgeon General Barnes, with assistance of Dr. J. J. Woodward, U. S. A., and Dr. Geo. A. Otis.

Editorial.

EXPERT TESTIMONY.

We have thought it best to offer some thoughts upon a subject that is of great importance to medical and medico-legal science, to justice and sociology—the reliability of expert evidence—and in speaking of this, we shall more particularly confine ourselves to that connection with toxicological examination.

It is perhaps a self-evident proposition that without experience in chemical manipulation, no man is to be implicitly trusted in a toxicological examination; but the converse does not of necessity follow, for many who are experienced and well posted, need the natural tact which is required for a successful outcome in such cases.

But while the chemical expert should be that which he often is not, an experienced and naturally careful man, it is no less true that all the witnesses called should be weighed in the balance, and tested according to the same scale of acquirements. Without this point guarded, the competent expert may be held up unjustly to the ridicule of the court and jury.

There are three factors that enter into the consideration of the examination of any case of poisoning. The symptoms, the post-mortem appearances, and the chemical analysis. In some cases the value of one predominates, in others it takes a subordinate rôle, but in none is any one of these alone sufficient to base a positive opinion upon. It is of the utmost importance, therefore, that each of the above mentioned factors should be carefully considered, and brought to bear one upon the other.

Some notorious examples of the incompetency of medical testimony, and especially as to the improper value placed upon one or more of these points mentioned, exists—among the records we have the Schappe case, where the appearance of the eyes, resembling those of a hawk killed by compound poisoning, was taken by one physician as sufficient proof that Mrs. Steinacke came to her death by similar means. Again, that notwithstanding the lingering nature of the case, prussic acid was the presumed and acknowledged poison! These were points outside of the chemical analysis. It was not so much the fault of the chemical experts, that mistakes and false impressions were made, as the admittance of testimony altogether incompetent, upon certain points having an important bearing upon the case.

Again, in the Mrs. Whorton case, for the supposed poisoning of Eugene Van Ness. The evidence on collateral points was not by any means clear. The symptoms which undoubtedly characterized poisoning by antimony, were thought to be present upon too slight

grounds, while the proper distinction was not made between symptoms dependent upon diseased condition and the action of strychnia upon the system. The most thorough and conclusive chemical examination could not make headway or dispell the prejudice engendered by such faulty testimony.

Again, the following case in our own experience :

A woman burned with coal oil at 8 o'clock, p. m. Slight injury upon the lower limbs and fingers. Not enough of themselves to create any disturbance of moment; no other injury or effect of pain found. Stomach moderately full of undigested food. These appearances were found upon a post-mortem examination. The symptoms before death were, a fluttering pulse, great excitement, etc., for which one-fifth or one-fourth gr. of morphine and bromide potasium were given. She took two doses. After which, or during the time, somulent intervening, with occasional slight stertor, but *stertor was not continuous*, for she would arouse and then was slightly wandering. At times her mind seemed clear. All this time, however, symptoms of excitement, with exhaustion, the same as appears from and after a nervous shock, were manifested by the pulse, respiration, etc. Death ensued about 10 A. M., next morning.

The stomach and contents was analysed, 1-22 gr. of morphia found. Now in this case, the physician was accused of giving too much morphine, and it was supposed by her friends that death ensued in consequence of opium poisoning. This case, analyzed, shows that the symptoms alone would look to opium poison, although not conclusive. Then the morphine found in the stomach would tend strongly to confirm, but the post-mortem, although unimportant in other respects, revealed the fact that *the stomach did not act*, the food was entirely undigested, that which was taken before 8 o'clock, the evening before, and immediately before the accident with the lamp. If the stomach was

in such a condition no absorption could take place, at least not of any consequence, and the morphine taken would not be readily absorbed. This fact had something, nay, much to do with the solution of the case, and the results of the post-mortem was of great importance in forming an opinion that death took place not through morphine, but by reason of a shock and exhaustion, in fact that not enough anodyne had been given, or at least absorbed.

So we find the toxicological expert is beset with difficulties outside of his own knowledge, and be he ever so competent he is drawn into the current that sets against incompetency shown in any of the testimony, and the legal and judicial management of the case. But it is without doubt true that so called "experts" differ—just as we find physicians and others—having different views upon the same subjects, as in the case of educated physicians we expect slight variations, accompanied with perfect agreements as to the main points. So with EXPERTS; the differences which *will* exist are nearly always greatly magnified, while the points of agreement are almost wholly overlooked. There are several reasons for this: 1st. The jury, however intelligent, are not scientific, and although with native or acquired keenness they may be aware of the discrepancies in the testimony, they have not the special knowledge that will cause them to reconcile such discrepancies, and the case becomes hopelessly entangled, until to all appearances the witnesses are diametrically opposed the one to the other. 2d. Those are called to testify who ought not to be permitted to enter the witness stand. Some who are so ignorant, that among their fellows their opinions amount to nothing, but who are *legally* as good as the most learned and scientific. Can we wonder that such being admitted to testify, and the jury believing them, erroneous views are taken upon points involved; the false light thus guiding men to wrong conclusions; what

can we trust to the evidence of physicians or chemists, who ignore the fallacies of the tests in analysis of arsenic—strychnine—morphine—dependent on the presence of organic matter, want of concentration of the fluid, and other similar reasons, and yet such are admitted, men who have not studied the matter sufficiently to recognize the principles upon which the tests act, and who have never performed any experiment themselves and are wholly ignorant; one whose judgment, based upon similar data, we would not take upon any subject, however simple.

Now these are some of the reasons of the errors, and consequent evils, that we find practically to exist. That such errors can be remedied we think is clear, but it is a difficult matter to obtain the practical recognition of the true rule for the admittance of "expert" testimony, remembering that an expert is one who, by experience, has gained that knowledge from which a learned opinion is formed; whether this be a *personal* experience or a well digested study of the opinions of others who are authority, we hold to be immaterial. It is true, however, that in certain cases, and as regards certain subjects, no man can have this requisite knowledge except from *personal* experience only, and none exemplify this fact more fully than the toxicologist. He can indeed obtain much valuable information from the ground work to the minutia of the subject, by the careful study and appreciation of the recorded or taught experience of others. But there is a certain *tactus erudicus*, a schooling of the hands, eyes, taste, a certain sorting and association of ideas, that will never be his except through careful and hardly worked out analysis performed by himself. Now he who possesses the first alone—a well digested view of the proposed principles from the experience of others—would not, in this case, be trustworthy as a witness, and should not receive the appellation of expert, or be admitted to the witness stand *in any case involving*

affairs concerning chemical tests and results, whereas he may be at the same time perfectly competent, and should be admitted to testify in cases involving surgical views, and treatment, etc. But if he is a physician recognized as competent by his fellows, and by law, he is entitled to the appellation of expert in both cases, if only he will claim such title and privilege. Against such the profession is loath, even if the law permits them, to raise objections, but he is as wholly incompetent as he who by all is recognized as an *ignoramus*, and his power of evil is increased many fold, his opinion carries more weight, and erroneous as they may be, they are more readily believed and incorporated by the court and jury as part of *their* opinions.

We are apt, and it has been customary, to raise a hue and cry against the so-termed "quacks," when admitted to testify in similar cases; but why? Certainly, if for any good reason, because they are considered uninformed, and, according to the same standard, the general practitioner, however intelligent and well posted in his profession in general, should be denied the right to testify upon such special subjects to which he has not directly turned his attention.

We see that, if the above position be true, every general practitioner may, *upon certain subjects*, and in definite cases, be considered truly an expert, for upon *some points* he has the knowledge requisite, while in other cases he is *not* to be admitted any more than the acknowledged incompetent pretender or non-professional man. "'Tis knowledge makes the expert, the want of it the failure;"—not a diploma, a fair professional reputation, or acknowledged general ability.

As an example of discrepancy of opinion and statement among *real* experts, and the cause of the same, we will introduce some points from the Ketchum case, bearing upon such, from Prof. Reese's criticism of the analysis of Dr. Aiken and others, and Dr. Williams' "Review

of such criticism," from which we extract the following:

Dr. Williams says:

"These experiments he (Dr. Reese) says he performed 'in the presence of Professor Reese, Dr. Genth, and some others,' and were as follows:—He took the *imitated* contents of Gen. Ketchum's stomach, containing the chloral and jasmine, and 'treated it with sulphuretted hydrogen, and obtained a red precipitate which dissolves in hydrochloric acid as that from antimony does; in other words, the two resemble each other in this property; they act alike; when this solution in hydrochloric acid is dropped in water, it also gives a white cloud just as antimony does; that white cloud is soluble in an excess of *hydrochloric* acid, which is also true of antimony; this solution, with sulphuretted hydrogen, again gives a precipitate which might be mistaken for one of antimony; the resemblance of the reactions is truly remarkable, so much so that I was astonished when I made the experiment.'

Let us for one moment examine the details of this experiment and compare them with Professor Aiken's analysis, and then we can see clearly how '*identical*' they are. That they may be taken in at a glance, I will put them in parallel columns, viz:—

PROF. AIKIN'S ANALYSIS.

Contents of Gen. K.'s stomach treated with sulphuretted hydrogen.

Produced "a reddish brown precipitate" which "dissolved in *boiling* hydrochloric acid."

This solution dropped in water gave a "white cloud" or precipitate.

"This cloud was dissolved by *tartaric acid*."

This solution treated with sulphuretted hydrogen or sulphide of ammonium gave "*a bright orange red precipitate*."

PROF. McCULLOCH'S EXPERIMENT.

Mixture representing contents treated with sulphuretted hydrogen.

Produced a "red precipitate" which dissolved in *cold* hydrochloric acid."

Solution dropped in water gave "a white cloud" or precipitate.

"This cloud was dissolved in *hydrochloric acid*."

This solution treated with sulphide of ammonium gave a "*yellow precipitate*."

Prof. McCulloch then adds, "I never got a *pure orange red* from antimony, except when in pure aqueous solution."

In examining these experiments we see several very marked and decided differences. 1st. We find that the

antimonial "reddish brown precipitate" required *boiling hydrochloric acid to dissolve it*, while the jasmine precipitate dissolved in *cold hydrochloric acid*.

2d. The *antimonial white cloud* was soluble in *tartaric acid*, but the other required *hydrochloric acid* in order to dissolve it.

3d. The final antimonial precipitate was a *bright orange red*, while the jasmine precipitate was a "*yellow precipitate*," which took a long while to settle down to the bottom of the tube. This experiment was performed in the presence of the Court, and the result exhibited in the Court-room; and every one present had the opportunity of seeing that there was not the slightest resemblance between the antimonial and the jasmine precipitates.

It is true that when Professor McCulloch poured the sulphide of ammonium into the solution of jasmine it became a *yellowish red color*, not an *orange red*, and examination showed the fact that the change of color was in the "*supernatant liquid*," and not in the *precipitate*, which was the *real point of inquiry*. The *supernatant liquid was red*, but the *precipitate was a dirty white!* and never was either "*yellow*" or "*bright orange red*."

Now, in connection with this we will say that, being interested to know for ourselves whether in the experiment performed there was a mistake, or if the difference as expressed by Drs. Aiken and Reese existed only in their imagination, or in difference of manner of expressing themselves, etc., we performed the experiment, using a prepared mixture of beef tea, egg, whey of milk, bread, etc., adding thereto chloral and tinct. gelsemium, passed sulphuretted hydrogen through it, dissolved the precipitate in HCl , and dropped it into water, where an undoubted but faint precipitate, resembling that obtained from antimony, was produced; but here the resemblance ended, for, upon adding tartaric acid, it was *not* dissolved. We afterwards added *sulphide of ammonia* to this undissolved precipitate, no red or orange red

color was produced. There was, indeed, a *yellow* color, but this merely from the admixture of the yellow sulphide.

To another portion of the same formed precipitate was added HCl. This dissolved it after a time—that is, it took it back to the same point and placed it in the same position as the precipitate of sulphuretted hydrogen when dissolved by HCl. This was going in a circle.

The *only* point of resemblance to the proper action of antimony under the same circumstances, was the cloud produced when the first precipitate dissolved in HCl. was cast into water.

We are therefore satisfied that taking the statements of Drs. Reese and Aiken, as to the steps in the analyses and experiments made, there was marked and fatal discrepancies between their modes of proceeding, and that the two processes could not rightly be compared with each other, and, moreover, that the analysis detailed by Prof. Aiken looked to the presence of antimony. This is not the same as saying that antimony was present in the specimen he analyzed, but it is saying that, taking his statement as true, and other things being equal, we know of nothing that would give the results in their entity but antimony.

We know the high position of Prof. Reese, and do not presume to place our judgment or knowledge on a par with his; but we take the case as stated, and then the experiments we ourselves performed, and judge accordingly.

Now, what is the bearing of this? It is unquestioned that the testimony of Dr. Reese and his colleagues had great influence with the jury, and we believe that Mrs. Ketchum was acquitted as much upon that testimony as any other—whether rightly acquitted or not, as far as other testimony is concerned, we do not say. We now have only the expert testimony and its influence and effects. If the position taken by Dr. Reese was correct,

then this is but an example of the good effect of correct expert evidence. If it was wrong, it shows how the best and most skillful may err, or worse, may be prejudiced.

We have seen some of the errors and difficulty. What is the remedy for such? Some have no remedy except in careful work and thorough knowledge of the subject, while for others there is a hypothetical and, at present, we fear, an impracticable remedy. Some have reasoned that such testimony should be submitted to *educated* jurors—those who can comprehend scientific points. Such a thing is simply impossible. The jury could never be altered. Others (and this we favor) insist upon a board of experts, whether to the State and district—who shall be educated and specially so—not selected by either of the parties interested, but appointed by proper authority, with proper care and restriction. We think this plan would operate well if only it could once be introduced, but “there’s the rub.” As the facts stand now the idea is of no practical value—only a point to work up to.

The rules of medical evidence must yet govern us, and we must more fully study and comprehend their value, their limits and their privileges, and so conduct ourselves when on the stand, if possible, that loss shall not accrue to ourselves, to justice and truth, or to the profession.

We cannot omit to say a word here with reference to the recompense of experts, as we find it in this State, and at the present time. As a rule, in this State, experts are considered in the same light as the colored race used to be—human beings who have no rights except to work. We are aware that now and then there are examples of a contrary opinion and actions corresponding thereto, but the rule is as we have stated it. We have principally ourselves to blame, and, as we have shown, we insist that under *some* circumstances, and in certain cases, *every physician* is a true and scientific as well as a

legal expert, it becomes us all to look after this phase of the matter and work it up to the proper standpoint. A few suits would help settle the subject and place it upon a healthy footing.

Apropos of this we will give the following questions that have been asked us by a physician, and the answers returned:

“Do experts receive additional compensation? Can they refuse to testify unless the fee is secured? Who pays the fee? What standard controls the amount that such fees shall be?”

Now, these are all important points, and are too often ignored by physicians, and we will answer all these questions thus:

We must keep in mind the difference between *common* witnesses and experts. We infer that these questions are intended to refer to the latter. The former only testify to actual facts; the latter give their opinion upon such facts. The common witness, if in the same county, is compelled to testify both in civil and criminal cases, *without* a guarantee of fee. The same rule applies if subpoenaed to another county in *criminal* cases, but the *expert*, although he is obliged to obey the subpoena, if in the same county, is *not* obliged to give his opinion in the case or testify *unless his fee is secured*. While, if subpoenaed *out* of the county, he is not even obliged to obey the subpoena without the guarantee of fees. The parties liable, and to whom he must look for such guarantee, are those who subpoenaed him. The rule regulating the amount of said fees must be established by the medical profession. For instance, A is subpoenaed *in his own county* to appear and give evidence *as an expert*, and express his professional opinion in a certain case. He is bound to obey and appear, but *can and ought* to refuse to testify unless the fee is guaranteed him. Say a case of malpractice and of alleged insanity, we should think the fee to be demanded would be reasonable all the way

from \$25 to \$50 per day, and perhaps more, according according to circumstances, if subpoenaed out of his county, for there he is not obliged to obey unless his fee is paid by the parties wishing his opinion, be it for the State or otherwise. Upon this subject we would refer gentlemen to Greenleaf on Evidence, vol. 1, sec. 310, note 3. Also, Bouvier's Dictionary, article, "Witness."

THE following resolutions were passed by the Fountain and Warren Medical Society, at its last meeting :

WHEREAS, As declared by the American Medical Association, it is the imperative duty of every physician to be a member of some local Medical Society; and

WHEREAS, The present requirements of this Society are not too high to admit as members, all practitioners worthy of associating with us in consultation. Therefore be it

Resolved, 1st, That all such practitioners within the territory included by our Society, be and hereby are urgently invited to present themselves as candidates for membership, and,

Secondly, That all such, who shall fail to unite themselves with us, within six months from the date of the adoption of this resolution, shall be thereafter debarred from the privilege of consultation with the members of this Society.

The following amendment to the Constitution was offered, and the consideration thereof postponed until the meeting hereby called : " From and after the second of October next ensuing, no person who is not a graduate of some respectable Medical College, or a member of some other Medical Society, bearing a respectable demit therefrom, shall be eligible to membership in this Society.

CIRCULARS calling for information for the *Medical Register and Directory of the United States* are being rapidly sent out, and this portion of the labor will soon be completed. It is earnestly desired that the responses be as prompt and as full as possible. *It is important to physicians, who*

have any education or standing, that they appear properly on this record, as the work will be one of permanent value, and will be constantly referred to. The forms containing the Directory of the first set of eleven States and Territories (Alabama to Georgia, alphabetically, inclusive,) are now in the hands of the printer, and there are but a few days in which information can be inserted in those pages.

Officers of public medical institutions of *all kinds*, hospitals, asylums, dispensaries, colleges, medical societies, etc., are particularly requested to furnish us with lists, catalogues, announcements, etc., in order to give brief histories of these institutions, and for use in perfecting the *Register and Directory* in all its parts.

It is intended that the work shall be exhaustive, and as nearly *correct* as may be, and it will be issued as speedily as possible; but the labor is immense, and the work is delayed by the want of promptitude in receiving replies to circulars and letters. Address, S. W. Butler, M. D., 115 S. Seventh Street, Philadelphia, Pa.

THE winter session of the Indiana Medical College commences October 14. From the large increase in number of applications a large class is expected to be in attendance. Everything, we believe, is running smoothly, and the college was never in better condition, nor the teachers more encouraged than at present. They expect to supply the want felt for a medical centre at this point, bidding God speed to all legitimate and healthy constituted institutions of the same kind, without regard to the point of location and contingent circumstances. If the Indiana Medical College is not sustained it would be for one of two reasons, 1st. either inefficiency in those controlling it, or 2d, a "financial crisis." That the first should not be a cause, those interested must settle—we are pleased to say we see no reason for fear in this regard; as to the second, which indeed is a legitimate cause of failure *in general*, it need

never trouble the college in particular. Those who have started from nothing and have succeeded, know how to provide and persevered. The worst is over, and with patience and well directed labor the school can be as independent as any, however old and wealthy.

By the kindness of Hon. John Coburn, Hon. Oliver P. Morton, and Hon. D. D. Pratt, the "Bobbs Medical Library" was made the recipient of certain works, all of which are acceptable, among them "A compendium of the Ninth Census, June 1, 1870, by Francis A. Walker, Superintendent of Census.

DR. LEHMAN, of Attica, Indiana, dropped dead in the eating room of the South Depot, Fort Wayne, last Friday morning. He had just come in on a train from the east. No cause for his sudden death is given.

THE Hamilton County Medical Society meets at Noblesville, the second Tuesday of October, 1873..

Miscellaneous.

A SLATE PENCIL DISCHARGED FROM A CHILD'S BLADDER.—by Allen Mussy, M. D. Port Jefferson, Shelby Co., Ohio. I send you the history of a curious case of urinary calculus which may deem worthy of publication.

Miss L., æt. 13, while attending district school in the fall of 1871, complained of pain in the region of the bladder and lumbar vertebræ, sometimes extending down the inside of the thighs. At the same time her general health began to fail. Menstruation, which had begun early, entirely ceased; to this the mother attributed the existing cause of her ailment. No physician was called, but popular domestic medicines were liberally given.

After a few months she appeared better and was permitted to visit about the country. During the fall of '72 she experienced great pain in urinating with increased desire, most marked at night.

Thus it continued until winter when the disease becoming more aggravated I was called to see her on January 23, 1873. The symptoms then presenting were substantially as follows: Anorexia and great emaciation, face exsanguine, covered with unhealthy looking sores which, on healing, left purple blotches; bowels constipated. Intense pain excited by pressure over the bladder; pain at every attempt at micturition and entire inability to void the urine unless the body were thrown forward, resting upon the hands and feet. Incontinence at night; irregular chills.

Without making a positive diagnosis, I put her upon the use of both vegetable and chalybeate tonics, and placed a cantharidal plaster over the lower vertebræ. I procured some urine for examination and promised to see her again in a few days. The urine gave an alkaline reaction. Saw her again February 2, found her somewhat improved in appearance. I now spoke of the probability of the presence of a calculus in the bladder, and proposed sounding as the positive means of diagnosis. But to this they would not consent and wished to postpone it indefinitely. I prescribed as before with an occasional laxative and added the acid treatment as recommended by Gross. Living at some distance from me I saw her only occasionally until in June at which time her condition was most deplorable, the urine dribbling away at all times, keeping her clothing and bed continually saturated. The patient informed me that at times she could feel something catch in the neck of the bladder causing the urine to intermit in flow. I again proposed an examination with the sound, but was refused on the ground that if the bladder contained a stone no operation should be performed. June 20, I saw her and

prescribed a decoction of buchu, which while increasing the secretion of urine, seemed to exert a salutary influence upon the irritated bladder. July 7, she informed her mother, something had caught and was coming from her. The mother could discover nothing. No urine passed during the night. Next morning upon rising from bed she again complained, and by examination the mother found a hard substance presenting from the meatus urinarius which with slight traction and little pain was removed. In the afternoon it was brought to my office. It was a calculus composed of the triple phosphates of ammonia and magnesia, surrounding a slate pencil $3\frac{3}{4}$ inches long, $\frac{1}{2}$ inch of which was visible at each end. The greatest thickness, $\frac{5}{8}$ of an inch, was in the middle, and it was gradually drawn to points at the extremities. It crumbles easily to the touch and emits a disagreeable odor as of decomposing animal matter, due, I suppose, to the deposit of a muco-purulent substance during the gradual lithic formation.

Saw her on July 9, and found her suffering from retention of urine caused by the inflamed condition of the urethra. I introduced a catheter and emptied the bladder of something more than a pint of limpid urine. I have heard from her twice since and she is rapidly recovering.

The interesting feature of this case is the voluntary discharge of a calculus of such dimensions, and of such fortunate dilator shape.

SEPARATION OF ORGANIC MATTER FROM WATER BY MEANS OF IRON.—Professor Medlock was requested, in 1856, by the Amsterdam Water Company, in Holland, to analyze their water and to find the cause of the bad smell and fishy taste.

In the water from the works before it came in contact with the iron reservoir and pipes, this chemist found 0.95 grains of iron, while in the other samples the iron was reduced to an unweighable trace; thus, instead of taking

up iron from the service-pipes, it was not only diminished, but even all precipitated. Notwithstanding the almost entire precipitation of the iron actually in solution in the water which had passed the iron pipes, it formed an objectional red deposit on standing, while the water from the works before entering the pipes, holding in solution nearly one half grain of iron per gallon, formed no deposit. He examined the deposit chemically and microscopically, with the following result: On ignition the precipitate charred and was almost entirely consumed, showing that it consisted of organic matter.

Now he made different analyses with water brought in contact with iron, and water in no contact with iron, and the result was, that while the water which was not brought in contact with iron contained 2.10 grains organic matter and 0.96 iron, the other contained only an unweighable trace of both, which showed plainly that the organic matter in the water was either decomposed or thrown down (rendered insoluble by contact with iron); and actually this water when filtered was clear, of good taste, had no smell, and was free from organic matter.

Medlock proved, as before stated, by a series of subsequent analyses, that iron produces nitrous acid by its action on the nitrogenous organic matter, which is the most destructive power nature has. Muspratt calls it 'Nature's scavenger.' This chemist found as a general result that by allowing water to be in contact with a large surface of iron, in about forty-eight hours every trace of organic matter was either destroyed or rendered insoluble, in which state it could be purified effectually by filtration.

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Original Communications.

UPON SOME FORMS OF DISEASED ACTION PRODUCED BY TOBACCO.

BY F. J. VAN VORHIS, M. D., INDIANAPOLIS.

Read before the Indianapolis Academy of Medicine.

There is nothing that I do not positively know of which I am more thoroughly convinced than of the deleterious effects of tobacco upon the brain. I have no personal experience in regard to it except a single experiment of my boyhood, when I had an indefinite idea that to use it was an evidence of manliness. The effect of that experiment was such as to forever banish any such idea, and to quench all desire for further personal experimentation.

I do not intend to read this society a moral lecture upon the subject, though the theme is a fruitful one, but to report a case that, in my opinion, illustrates the effects of the long-continued use of the drug. I do not wish it understood that I believe, in every case, it will result in the same condition that it did in this. I do believe, however, that the tendency is always in the same direction.

It is very difficult for us to appreciate all the individ-

ual's peculiarities that in one case causes it to result as in this, while in another it is used for many years with but little perceptible effect.

The effects of the drug have not been sufficiently studied by the profession.

When it is recollected what a large part of the population of this country use tobacco habitually in some form or other, it assumes an importance in medical investigation not occupied by many, if any, of the other drugs.

The effect of it in those who are addicted to its use, simply as a modifying agent in pathological condition, and upon the effect of therapeutic agents, opens a field that is neither narrow nor unimportant. But into this I shall not enter, but proceed at once to the case.

I desire, in the beginning, to call the attention of those present, who may be familiar with the symptoms, to the similarity of this case to those occurring in "Multiple cerebro-spinal sclerosis."

On the 10th of October, 1871, I was requested by my friend, Dr. John M. Gaston, of this city, to see Charles P., and learned the following facts in his history: He was eighteen years old, and had been occupied for about three years in training horses. His father died very suddenly three years before under circumstances that would lead to the suspicion of cerebral hemorrhage. Beside this there was no evidence of any hereditary predisposition.

Previous to the month of June, 1871, he had been in good health. During this month, however, he had an attack of vertigo, with nausea and vomiting, that, at the time, was attributed to over-heating. He recovered from this very soon.

In July following he had several paroxysms of intermittent fever, for which Dr. Gaston treated him. The paroxysms were arrested, but he never felt quite well

afterward, the most noticeable symptom being loss of appetite.

During the month of September he began to have occasional attacks of vertigo, and again applied to Dr. Gaston, who found him constipated, and prescribed a laxative.

About this time he received an appointment as baggage master on one of the railroads from this city, but was so much troubled with vertigo, nausea and vomiting that he was obliged to give it up. Dr. Gaston saw him again, soon after, when he walked with a shuffling gait, feet wide apart, knees flexed a little, the body a little inclined forward, and arms held slightly away from the body.

I found him in bed, unable to stand, and having frequent attacks of vertigo and vomiting. He talked very slowly, and had considerable difficulty in articulation, and said his tongue felt thick in his mouth. There was a little nistagmus when he looked directly to the front, and he found considerable difficulty in turning his eyes to the right or left. It was with some difficulty that he could use his arms, and, when he attempts to hold anything in his hands, they are flexed slightly upon the forearm. He could not extend his fingers completely. Muscular power was greatly diminished. The grasp of the hand was not greater than that of a babe. His arms, like his fingers, could not be completely extended, nor could he, as he lay upon his back, hold them straight above him. When he attempted to walk, a tendency to pitch forward caused him to have a hurried gait. He could go up a flight of stairs very well, but found it utterly impossible to get down without help. The topographical instinct was partially lost. When he closed his eyes and attempted to touch the point of his nose, he invariably touched one or two inches to the right or left, according as he used the right or left hand. He coughed frequently upon the slightest cause. His answers to questions were intelligent enough, but he manifested a

good deal of irritability if he was contradicted. His pulse was sixty, full and soft, but a little irregular. His temperature was normal. There was no pain, no muscular twitching, no hyperæsthesia nor anæsthesia, and no derangement of the motor system, except the muscular weakness at the upper extremities, and the loss of the power of co-ordination of the lower, before spoken of.

Eight days after, I saw him again, with Dr. Gaston, and found him much weaker than before. He was still vomiting and suffering from vertigo. His articulation appeared to be a little improved, and he had partially regained the topographical instinct. Otherwise there was no change. At my suggestion 1-30 grain of sulphate of strychnia was administered hypodermically and repeated in six hours, with the effect of arresting the vomiting until the evening of the next day, when it returned and was again arrested in the same way. It returned again in a few hours, when he was given 1-30 grain of sulphate of strychnia and 1-40 grain of sulphate of atropia, with the very gratifying result of combatting the vomiting completely. For the six days following the vomiting was controlled by using the injection every twenty-four hours. During this time he ate as much as usual, and his digestion appeared to be perfect.

At the end of this time, or on the 25th of October, I saw him again. The pulse was seventy-five, full, of ordinary strength, and had a peculiar elastic rebound. There was still some vertigo, but not so much as there had been before. It was greatly increased if he turned upon his left side. There was still some want of topographical instinct. He was propped up in bed without vertigo being increased as it had always been before. He was bright and cheerful, talking and laughing as usual when well. Muscular power was much improved. Tongue was clean and preserved a perfectly healthy appearance, as, indeed, it had from the beginning.

Five days after, Dr. Gaston informed me that, on the

evening before, the strychnia and atropia having been omitted, he vomited again, and it had to be resumed.

One or two days later, there being some constipation, he was given the following: Aloes (soc.), gr. x; ext. of belladonna; ext. of Nux. born, aa., g. v.; M. fl. pl., No. 10; sig.: one as required. One of these pills was found to be sufficient to move his bowels and prevent vomiting.

On November 2d I saw him again, with the doctor, and found him sitting up in a chair, feeling perfectly well. He had no nausea, vomiting, or vertigo, for the four days previous. He could talk without difficulty, and was able to guide his hand to any part of his body with but little hesitation. There was no nystagmus, but a little difficulty in turning the eyes to the right or left. He felt perfectly natural as he sat in his chair, and as though he could get up and walk without the slightest difficulty; but, when he made the attempt, there was very great difficulty in getting upon his feet, and, when that was accomplished, he could not stand with his eyes open or shut without holding to something. If he attempted to walk, the effort was like that of a child in its first attempts. He had to fix his eye upon some point, and was inclined to go the faster the nearer he got to it. He expressed himself as feeling very tall when he walked. When he would fall, as he often did, he did not know he was falling until he was down. While he was sitting he had not the slightest difficulty in using his legs. At this time there was no evidence of disease except the loss of the co-ordinate movements of locomotion. The muscular power of the lower extremities was as great as it had ever been.

Two or three days after, Dr. Gaston stopped the strychnia and atropia, and the vomiting did not return, nor did it any more during the continuance of the case.

Ten days after, or upon November 12th, Dr. Gaston asked me to take charge of the case, and I saw him

again. There was but little, if any, change since I had seen him before. His mother said that at times he walked better than at others.

The symptoms in the case had been so similar to those in "multiple cerebro-spinal sclerosis," that I did not feel justified in omitting those remedies which, according to past experience, were the only ones that promised any relief, and therefore gave him chloride of barium and tincture of hyosscamus, directed by Prof. Hammond, of Bellvue.

I saw him now and then until November 22d, during which time he improved very slowly, if, indeed, there was any improvement, and was like a child learning to walk.

At this time I learned for the first time that, from his sixth year, he had been in the habit of using tobacco in large quantities. During the five or six months prior to his sickness he had used over an ounce of fine cut tobacco, and smoked from five to eight cigars, per day. This was continued up to the time when he was confined to his bed.

About the last of October, when he was able to leave his bed, he began to smoke again, using from one to three cigars per day. From that time he ceased to improve. I ordered it stopped, of course, and, in seven days, he gained fourteen pounds in weight. After this he improved rapidly, and in about four months was entirely well.

Now, I am ready to acknowledge that the evidence that the symptoms in the case were the result of the use of tobacco is not conclusive. This, however, was the most natural conclusion to which I could come after studying the case with all the care and skill of which I was capable.

Here was a class of symptoms said by many neuropathologists, particularly by Hammond, to be the destructive result of cerebro-spinal sclerosis. There is not a sin-

gle case on record of recovery from cerebro-spinal sclerosis, and, therefore, I do not believe this to have been any of that kind, for I am hardly vain enough to suppose that the first case of recovery would be in my hands.

What, then, was the pathology that caused so serious a combination of symptoms, and yet from which recovery occurred so soon? I think the vascular structures is the only place to which we can look for an explanation.

The peculiar condition of the vessels of the brain in such cases I have referred to so often, in this society, I shall not occupy your time with to-night.

The rapid and perfect recovery is proof that there was no structural lesion, and that, in all probability, the symptoms were the result of intervascular pressure.

That tobacco was the prime cause in the case I have but little doubt. When I first learned of the habit I was not disposed to attach more importance to it than that of an aggravating circumstance that it was better to avoid, but, as the case recovered so rapidly, and, ultimately, so perfectly, I was more and more impressed with the belief that the whole trouble had its origin in the use of tobacco. Since that time I have been strengthened in the view by studying the effects of the drug in other cases.

DUTIES OF THE PHYSICIAN.

BY T. F. WOOD, M. D.

Address before the North-Eastern Indiana Medical Society.

MR. PRESIDENT AND GENTLEMEN: When chosen by this society as an essayist for the present occasion, we felt our incompetency to fill the position, but would not decline, because we considered it our duty to put forth every effort in our power to maintain and perpetuate the association which has thus appointed us, and in that way lend our feeble assistance to the cultivation and ad-

vancement of medical science. Therefore in the presentation of the few broken thoughts which we have arranged, we ask your indulgence, and while you carefully criticise each erroneous idea, we hope you will make due allowance for the diversified, and many times unfavorable circumstances with which the country practitioner is surrounded, as it appears to be almost impossible to so arrange his professional business that he can discontinue active labor and retire to his studio at any hour he may choose.

There is perhaps no vocation in which men engage that imposes more numerous and greater duties, than the study and practice of medicine. Yes, we think if properly viewed and justly estimated, all will concur with us in the opinion that there is no calling in life if properly pursued which subjects its pursuant to more arduous duties, and greater responsibilities than that of him who choose to minister to the ills and aches of those who are so unfortunate as to be the victims of disease.

We feel our incompetency and lack of intellectual attainments to do justice to a subject of so vast importance in the essay which we have written for the occasion, which of necessity must be brief, in order that we do not occupy your time, or weary your patience in listening to what you may deem disconnected ideas, non-essential remarks, or unjust persecution of those members of the profession who are indolent, inactive, and not alive to the important duties which devolve upon them as members of the medical profession. But if we err many times, or fail in toto in the present attempt, we hope the day-dawn of our future life will be bright, and that our efforts will finally be crowned with success, and we be numbered among those of the medical fraternity who shall at last occupy a respectable and reputable station. We hope if we fail to attain that high and enviable position in the time honored science that many have, and more are destined to do, we can congratulate our-

selves by saying that our efforts have not been in vain, but that we have met with comparative success, been amply paid and justly rewarded for every effort we have made. We do not expect to write an elaborate dissertation upon the labors and duties of our profession, but merely to mention some which appear to be of utmost importance to individuals, and the profession generally. We are not competent to undertake such a task, yet we are fully convinced that much depends upon us, that if we succeed or attain any degree of medical eminence, it will be accomplished only at the expense of long, faithful, and thorough application of our talents to the different branches of medical science. Such at least is the record of those heroes of this science whose names are bright in the world's history, and who have bequeathed to us such of its privilege as we now enjoy. But we have other duties to perform than those which consist in an endeavor to obtain a world wide reputation as medical writers. Those which belong to the more humble walks of professional life, those which should be, if they are not, the stepping stones; yea, the very foundation (so to speak) of all those professional monuments which we hope to erect.

The relation which we sustain to the public as overseers, or guardians of the public health, demand of us that we be men of pure hearts, and honest motives; men who feel an interest in the welfare of mankind generally, and especially of those who are willing to trust and confide in us when in health, and who look to us for relief and assistance when raked with pain, or scorched with fever. As physicians, if true to the trust reposed in us, competent and reliable to the chosen calling, we are admitted to the family circle of our patrons and made acquainted with its relations in a manner which no other calling would entitle us, but which is necessary to success in the treatment of disease. A knowledge of these relations it behoves us to keep invio-

late, and within our own breasts. When we pass the threshold of the sick room we assume the performance of duties which are of vast importace to us, and great moment to the patient whom we are called upon to relieve of suffering, and restore to health. Hence how important that we justly appreciate the necessity of professional honor: without this, success cannot attend our efforts only for a brief space of time. It becomes our duty therefore to impress upon the minds of the people that we are men of honor and uprightness, and are interested in the ways and means adopted for the relief of the sick and suffering of our race. There is a demand upon the physician for integrity. Pure and unsullied as the driven snow, should be the record of him who ministers at the sanctum sactorum of humanity. But aside from the obligations which belong more properly to our moral standing, there are others of equal if not greater moment in securing the confidence of our patrons, and to our success as practitioners. We refer, of course, to our intellectual endowments, fitness for the position, and love of its labors. The position demands that its occupants possess the richest intellectual endowments with which nature or nature's God has clothed the human mind. The excellency of the profession merits such minds as have received the richest and brightest of intellectual qualifications. Those minds whose apprehension is quick, reasoning powers good, judgment correct, memory retentive, and that have a natural taste for the study and practice of the healing art. Last, but not least, the mind should be so constituted as to love labor. We should possess a steadfastness of purpose, and a resolution that will cause us to pursue our object in the face of every foe, with an unflaging energy and an unremitting zeal.

It is too true, the saying that many enter the medical profession who have mistaken their calling, those who are not qualified by nature, and much less by habit to

enter a field of labor whose cares are so numerous, and responsibilities so great.

We occasionally see individuals who have failed in all their undertakings in life, seeking refuge, and feigning success in the compounding and administering quack nostrums to the innocent and unoffending victims, who are subjects of their prey. Fortunately, however, for the public, they travel about from place to place, and from hamlet to hamlet, seeking their prey, duping only those who are willing to be fascinated by their familiar howl and brilliant advertisement. These incendiaries to the public health falsely assume the name of physicians, only for pecuniary reward, and for the purpose of obtaining a livelihood without either mental, or physical exertion. They sail along upon the tide of time with humbuggery for their motto, dishonesty their means, and the mighty dollar their reward. In duty to the public, we would say beware, they seek only your pecuniary interest. To the profession as regular practitioners, it is our duty to oppose and banish evils of this nature from our midst; not by clamorous howls and boisterous appeals to the people, but by elevating our moral and intellectual standing as medical men. We will do this only by cultivating within ourselves, principles of honor, and uprightness, and by long, faithful, and thorough application of our minds to the chosen calling.

No short and spasmodic effort will suffice to accomplish this end, or maintain the high standing which the profession demands. The race is not to the swift alone, but to the untiring. Obstacles continually present themselves on our way, but if attacked with judgment, vigor, and perseverance are almost certain to be overcome. We are not disposed to murmur, notwithstanding we are many times unjustly opposed and persecuted. As we meet with opposition, censure and much scandal, let us resolve never to relax in energy nor weaken in nerve

until we have outstripped unjust opposition, and caused censure and scandal to affect and rest upon those from whom it emanated, until we have ascended the craggy steps of medical science and engraven our names among those whose memory we cherish, and whose names will be ever bright upon the tablet of time. If we wish to do this, it will demand of us a life time of labor, both mental and physical. It will be impossible to live a life of ease and indolence if we wish to weave laurels of fame, or occupy an honorable station amongst the brotherhood of physicians. If the heroes of medical literature had reposed in indolence and ease, waiting for some powerful circumstance to develop their minds without effort upon their part, we could not to-day describe to them the brilliant productions which they receive and justly merit. But to them the medical world is indebted for the high point of intellectual attainments, and for the numerous and superior advantages we possess of pursuing the study of physiology, pathology, and the various other branches which we have to investigate. Our country is amply provided with medical schools which are well supplied with every thing necessary for the acquirement of a thorough medical knowledge.

These noble institutions it behoves us to maintain and perpetuate, as so many sacred legacies bequeathed to us by the untiring efforts of our predecessors. We are not only called upon to perpetuate institutions and truths already established, but to go forward searching for hidden mysteries, develop new truths and add new principles to medical science. Our advantages are great and much is expected of us. The future of medicine presents a vast field for investigation, and it is for us, and our posterity to explore this field and establish all new and useful principles within the grasp of the human mind. Let us be steadfast in our undertakings and fail not. No feeble effort will suffice to maintain this noble inheritance. But we must sacrifice ease, pleasure, and many

times comfort if we preserve it inviolate. Life was not given to us simply to admire the beautiful structures and sublime truths established by others, but that we might labor in the fields yet unexplored, dig from the heart of science new principles, thereby convincing future generations that our mission on earth was one of usefulness, and that we were triumphant in all of our reasonable undertakings. They only know triumph who notwithstanding the powers of opposing forces enter into open and perpetual combat for the right. The nerve that never tires, the eye that never blanches, thought that never wanders, are the most sure masters of victory. And he who would stretch forth his puny arm to gather the golden sheaves from the field of medical science, must first bear the heat and burden of the day. He that would gain the ascent of that eminence from whose top towers the medical growth must first take a foothold upon the craggy steps. He who would compass the ocean of truth must first leave the pebbly shore, though the favorable gale that shall waft him to the desired haven comes not. Self ease is to be sacrificed, strong energy concentrated, and a hearty unwavering purpose enlisted in the noble calling. Let us remember that dreams bring not the realization of fond hopes. Cravings for laurels we would call ours, gives not the assurance that they will be, nor is desire always the harbinger of fruition. Half heartedness is the prelude to failure, but warmth of soul is followed by success. Ambition for usefulness, success, and the relief of suffering humanity should be our motto, steadfastness the means, and victory the end.

Proceedings of Societies.

PROCEEDINGS OF MICHIGAN STATE BOARD OF HEALTH.

A regular meeting of the Michigan State Board of Health was held in the office of the Secretary of State at Lansing, October 14, 1873. In the absence of the President, the board was called to order by the Secretary. The roll was called and a quorum found present, as follows: Z. E. Bliss, M. D., Rev. C.H. Brigham, Rev. J. G. Goodman, R. C. Kedize, M. D., and H. B. Baker, M. D. On motion of Dr. Bliss, Dr. Kedize was elected President *pro tem*. The minutes of the last meeting were read and approved. Reports of standing committees being in order, Dr. Bliss, chairman of the Committee on "Food, Drinks and Water Supply," reported progress. Dr. Kedize, chairman of the Committee on "Building—Public and Private, including Ventilation, Heating, etc.," reported progress in the production of an article on the Hygiene of School Buildings, and presented drawings illustrating the same. The paper was ordered printed in the first annual report of the board, and the Secretary was authorized to procure the engraving of the illustrations for the paper. Dr. Kedize as chairman of the committee on "Poisons, Explosives, Chemicals, Accidents, and Special Sources of Danger to Life and Health," reported that he had presented a memorial to the Constitutional Commission, asking them to consider the propriety of embodying in the new constitution a clause providing for the forfeiture of capital of stock companies for each life lost from causes which such companies might prevent. Dr. Kedize, also, as chairman of the Committee on "Legislation in the Interests of Public Health," reported as having presented a memorial to the Constitutional Commission, asking them to embody in-

to the proposed new constitution a declaration of the duty of the State to protect the lives and health of the people who constituted the State.

At the afternoon session all the members of the board were present. Dr. Hitchcock, the President, in the chair, and Dr. H. F. Lyster having also arrived.

The Committee on Circulars reported circulars No. 1, 2 and 3 prepared and printed, and circular No. 1 distributed to the clerk of the local Board of Health in each township, city and village in the State; it recited the several sections of the law relating to the duties of clerks of local boards of health in connection with this central board, and transmitted a blank for a special report to this board from each local board, embracing a statement of the number of cases of certain "diseases dangerous to the public health."

Circular No. 2 is to be sent to every practicing physician in the State, calling attention to the law requiring them to report to the local board of health every case of small-pox "or any other diseases dangerous to the public health," which they are called to visit; it also includes a form recommended for the use of physicians in complying with this law.

Circular No. 3 will transmit to the clerk of each local board of health a blank for an annual report to the State Board of Health for the year ending September 30, 1873. Also a form of record recommended to be kept by the clerk of each local board of health, and a form of notice designed for the use of householders in complying with section 1734, Compiled Laws, 1871 which requires every householder to immediately give notice to the local board of health of every person within his family taken sick with small-pox "or any other diseases dangerous to the public health."

The following resolution was offered by H. B. Baker and adopted :

Resolved. That no papers shall be published in the

annual report of this board, except such as are ordered or approved for the purpose of such publication by a majority of the members of the board; and that any such papers shall be published over the signature of the writer, who is entitled to the credit of its production as well as responsible for the statements of facts and opinions expressed therein.

On motion of Dr. Lyster it was resolved that the first annual report of the board should consist of the act establishing the board, the introductory address of the President at its first meeting, names of the officers and members of the board, the committees and chairman of same, the by-laws of the board, the report of the Secretary, including the statement of the expenditures, the circulars issued by the board, and such papers as may be ordered by the board, to be published therein. On motion, the President and Secretary were authorized to arrange the order of the material in the report. The Secretary was directed to compile for the first annual report the statistics collected by the board. Dr. Kedzie, as chairman of the Committee on "Accidents, etc." presented to the board his views on the subject of additional legislation in the interests of public health. He advocated making it a criminal offense for railroad employees to neglect means for the protection of human life. He presented some statements giving the number of killed and wounded in railroad accidents during the past few months. The subject was discussed and appeared to meet with favor. After transacting the ordinary business the board adjourned. The next regular meeting of the board will be on the second Tuesday in January.

FOUNTAIN AND WARREN MEDICAL SOCIETY.

At the recent semi-annual meeting, October 9th 1873, the Fountain and Warren Medical Society convened at

the Masonic Hall, in Williamsport, Ind., at 10 o'clock
A. M.

Present—Drs. Ross, Smith, Tebbs, Armstrong, Messner, Moore, Watson, Weldon, Leech, Fenton, Page, Kellenburger and Lamon.

The President, Dr. Justin Ross in the chair.

The minutes of the previous meeting were read and adopted.

The Secretary reported that he had procured 100 copies of the Ethics of the American Medical Association, and 100 certificates of membership, and also filed a semi-annual report of receipts and expenditures.

On motion of Dr. C. D. Watson, duly seconded, an assessment of one dollar was made upon each member of the Society.

AFTERNOON SESSION.

Dr. Watson offered the following motion: That the President appoint a committee of three, to revise the constitution and by-laws, and report at the next meeting; the motion duly seconded, was put to vote and carried, *nem con.* Whereupon the President appointed Drs. Watson, Weldon and C. V. Jones.

An authenticated charge being brought that one of the members of this Society, had publicly engaged in practice as a so called Eclectic physician, contrary to the rules of the Ethics, both of this Society and of the American Medical Association, the name of that member being J. W. Kelley, a vote of the Society was taken thereon, which resulted in the sentence of expulsion, and the Secretary was ordered to erase his name from the roll.

The President now announced that since the last meeting of the Society, it had pleased Almighty God to remove by death, three of our colleagues, Dr. William L. Leyman, of Attica, Dr. William Messner, of Pine Village, and Dr. Robert Stevens, of Chambersburg. Whereupon Dr. E. K. Kellenburger, of Attica, introduced

memorial resolutions relating to the loss of our esteemed brother, Dr. Leyman, and it was by vote made the duty of Dr. Justin Ross to prepare memorial resolutions relating to the death of Dr. William Messner, and of Dr. S. J. Weldon to prepare appropriate resolutions regarding the death of Dr. Stevens, and it was further ordered that an engrossed copy of the resolutions be sent to the respective families of the deceased members, and that the Secretary prepare copies for insertion in the newspapers published in Fountain and Warren counties.

Dr. Leech, of New Lebanon, having been appointed at the last meeting to present a paper upon the subject of Puerperal Peritonitis, now appeared to fulfill that duty, premising that professional occupation of his time had prevented him from completing the essay, then proceeded to read a very interesting and instructive paper on that subject, after which a discussion of some length took place, which was participated in by most of the members present.

Dr. Weldon, after remarking that the subject of portable animal poisons, personal septic poisons and personal contagion, was now occupying a very prominent place in the mind of the profession, and that in his opinion, no more important subject could be investigated, moved a vote of thanks to Dr. Leech, coupled with a request that he would continue the subject at the next meeting, which was carried in the affirmative.

Dr. L. C. Page of Rainsville, having at the last previous meeting, been selected to present a paper upon the subject of Cholera Infantum, was now called upon. Whereupon he presented and read a comprehensive and well written essay upon that subject, which received complimentary comments from a number of members, after which on motion of Dr. Tebbs, a vote of thanks was passed, accompanied by a request, that Dr. Page would continue the subject at the next meeting, and would extend his remarks to such other collateral affections of

children's bowels as he might select. Dr. Weldon first observing that irregular practitioners and their friends were circulating most ridiculous stories as to the objects and motives of our Society, introduced the following resolution :

Resolved, That all the future meetings of this Society be held with open doors, so that all who desire it, may witness the proceedings and listen to the discussions.

Dr. Weldon read a paper having reference to the frequency of the occurrence of death following the inhalation of chloroform, attributing it to muscular and nervous deterioration of the heart, caused by deficient aerial nutrition and incomplete decarbonization of the blood. A discussion of this subject followed which was participated in by Drs. Watson, Tebbs, Lamon, Smith, Leech and Kellenberger.

The amendment to the constitution, heretofore offered by Dr. S. J. Weldon, which had been laid over for action at this meeting, was now called up, and after some discussion was referred to the committee on the revision of the constitution, as the matter now falls appropriately within the sphere of their action.

On motion, it was ordered that the Secretary prepare an abstract of the proceedings for publication in the *Indiana Journal of Medicine*, and in such local papers in our district as can give them room in their columns.

Ordered, that the Secretary furnish members in good standing with certificates of membership upon application made to him, and that he keep a record thereof.

Ordered, that the President tender the thanks of the Society, to the Masonic Fraternity in Williamsport, for the use of their hall.

On motion, the Society adjourned, to meet at New Lebanon, at 10 o'clock A. M., on the second Thursday of January next ensuing.

(Signed)

SAMUEL J. WELDON,

Secretary.

Reviews.

INSANITY IN ITS RELATION TO CRIME—A TEXT AND A COMMENTARY. By William A. Hammond, M. D., Professor of Diseases of the Mind and Nervous System, and of Clinical Medicine, in the Bellevue Hospital Medical College, etc., etc. Appleton & Co., New York; Cathcart & Cleland, Indianapolis.

A very neat little book, with a text of detailed cases, and a commentary with condition that we consider to be correct in the main. The author, however, has gone over, we think, from one extreme to the other; for, whereas he formerly held that impulsive insanity was not only a reality, but a valid plea for acquittal, he now considers that "some of the insane are such monsters that they should be slain upon the same principle that we slay wild and ferocious beasts." And our opinion is that if one is insane enough to be acquitted, he is insane enough to be confined, and that *all such* should be punished in *some* degree, but not to the extent or in the spirit that *vengeance* would naturally suggest.

ANNUAL ANNOUNCEMENT AND CIRCULAR—LONG ISLAND COLLEGE HOSPITAL. Brooklyn, New York. Session, 1873-4.

Regular term commences March, 1874. Reading term, October, 1873.

POPULAR JOURNAL OF PHYSICAL AND MENTAL HYGENE. T. H. Hilsby, M. D., and T. E. Mays, M. D., Editors. Williamsport, Pa. Price, \$2.

THE ANNUAL REPORT OF THE SPECIAL COMMITTEE ON THE REVISION OF THE CONSTITUTION, submitted at the Portland Meeting, August, 1873, American Association for the Advancement of Science.

THE STUDENT'S GUIDE TO MEDICAL DIAGNOSIS. By Samuel Fenwick, M. D., F. M., C. P., Assistant Physician to the London Hospital. From the third revised and enlarged English edition, with eighty-four illustrations on wood. H. C. Lea, Philadelphia. Cathcart & Cleland, Indianapolis.

This is a good companion, or, indeed, a substitute for Da Costa's larger work. It is well illustrated, and will

be found as a manual to fill the place intended by it. The size of the work is something in its favor—at least for the use of students.

LECTURE ON DISEASES and INJURIES OF THE EAR. Delivered at St. George's Hospital, by W. P. Dalby, F. R., C. S. M. B. Contab, Assistant Surgeon to the Hospital. With twenty one illustrations. Lindsay & Blackiston, Philadelphia; Cathcart & Cleland, Indianapolis. 1873.

These lectures on the ear appeared in 1872 in the *Lancet*. The author seeks to "occupy a place between Tonzbee and Hinton" upon the subject discussed. Diseases of the external and internal ear are considered, and especial attention paid to prevalent catarrh. The text is minute and thorough upon the subject treated.

AN INTRODUCTION TO PRACTICAL CHEMISTRY, INCLUDING ANALYSIS. By John E. Bowman, F. C. S., late Professor in Practical Chemistry in King's College, London. Edited by Charles Bloxam, F. C. S., Professor of Chemistry in King's College, London, etc. Sixth American from sixth and revised English edition. H. C. Lea, Philadelphia; Cathcart & Cleland, Indianapolis.

This work and its companion, "Bowman's Medi-Chemistry," are too well known to need any review at our hands. We have only to assert that, without disparagement to any other, it, taken altogether, is the best "student's manual," upon the subject treated, that we have ever seen. In some parts others, no doubt, exceed it; but we cling to it now as in times past. In this edition some alterations have been made, which, we think, are improvements.

A MANUAL OF MEDICAL JURISPRUDENCE. By Alfred Swain Taylor, M. D., F. R. S., Fellow of the Royal College of Physicians, etc., London. Seventh American edition, revised from the author's latest notes, and edited with additional notes and references, by John T. Reese, M. D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania, etc., with illustrations in wood. Philadelphia, H. C. Lea; Indianapolis, Cathcart & Cleland. 1873.

This long-looked-for and long-promised work is at length on hand. As were the former editions, edited by

Primsore and Hartshorn, this is not only a valuable work, but, perhaps, the very best text book we possess upon the subject embraced. The present edition is similar to the last, with a few additions by the present editor, Professor Reese. We expected that these additional notes would be more abundant than they are, the bulk of them referring to Wharton and Van Ness' trials—one in considering the subject of antimony, the other that of strychnia. These views of position have been for some time before the profession of the United States. Whether the view taken of these cases was correct or not, no doubt each physician has decided, in his own mind, long since; but, in whatever light we may view them, it need not detract from the value placed upon the work as an authority. The arrangement of the various subjects, added to the concise and plain manner of expressing them, recommend it now as in times past.

CHEMISTRY, INORGANIC AND ORGANIC, WITH EXPERIMENTS. By Charles Landon Bloxam, Professor of Chemistry in King's College, etc., with two hundred and ninety-five illustrations. From the second and revised English edition. Philadelphia, H. C. Lea; Indianapolis, Cathcart & Cleland.

Among the various works upon general chemistry issued, we know of none that will supply the average wants of the student or teacher better than this. Fownes has long been a text book, and, as revised, is a comparatively good one. Roscoe has much to recommend it, but is sadly deficient in many parts. Miller's elaborate work is more of an encyclopædia than a text book. His smaller work, *as far as it goes*, is excellent. Bloxam's is modeled somewhat upon a similar plan, and contains much more than the "Practical Chemistry" of Miller. His many illustrations and detailed experiments supply a want always felt by the chemical student. We would recommend it above all as a text book on general chemistry.

FAMILY THERMOMETRY. A Manual of Thermometry for Mothers, Hospitalers, etc., and all who have charge of the Sick and of the

Young. By Edward Sequin, M. D. M. P. Peterson & Son, New York; Bowen & Stewart, Indianapolis.

We have reviewed this work before, and need say nothing more as to its value to physicians, etc. It is short and condensed, while it borders upon the popular in some parts, it is expressed scientifically enough to make it valuable to all.

THE CEREBRAL CONVOLUTIONS OF MAN. Represented according to original observation, especially upon their development in the fetus. Intended for the use of physicians. By Alexander Ecker, Professor of Anatomy and Comparative Anatomy in the University of Frieberg, Baden. Translated by Robert T. Edesand. D. Appleton & Co., New York; Bowen & Stewart, Indianapolis.

A very fine and laboriously-prepared monogram, intended to remove one of the difficulties in the study and proper understanding of the anatomy and physiology of the brain. It should go with "Solly on the Brain." and kindred works, and be in the hands of every physician. Not the least quality to recommend it is its compact form.

CLINICAL ELECTRO-THERAPEUTICS, MEDICAL AND SURGICAL. A hand book for physicians in the treatment of nervous and other diseases. By Allen McLane Hamilton. Physician in Charge of the New York State Hospital for Diseases of the Nervous System, etc. With numerous illustrations. D. Appleton & Co., New York; Bowen & Stewart, Indianapolis.

HISTORY OF ELECTRICITY. General Laws of electrical Currents --Phenomena of the Two Currents. Galvanization, Faradization, etc., are considered, after which the use of the currents in certain described conditions are noticed, together with Galvano-cautery, to which is added an appendix, giving directions for the management of the battery, preparations of solutions, etc.

This is a very full but concise treatise upon the subjects mentioned, and what is, perhaps, as much to the point, it is plain and easily understood, without that intricate web of technical terms that confuse and often mislead the general practitioner. We would certainly recommend it as a book of reference.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR. Including the anatomy of the organ. By D. B. St. John Roosa, A.

M., M., Professor of Diseases of the Eye and Ear in the University of the City of New York, etc. Illustrated by wood engravings and chromo-lithographs. Wm. Wood & Co., New York; Cathcart & Cleland, Indianapolis.

That this is the work of Professor Roosa is, perhaps, enough to recommend it to the profession in general, as well as to the "specialist." While much of it is "founded upon his own experience," he has profited by that of others, and gives due credit to those who have labored to place this branch of medical science upon a better foundation than it was but a few years ago.

The anatomy of the ear is of such a character that to understand it is a different study, while the physiology and pathology of the organ follow the same rule. Minute and careful dissections are to be made; the relation of the parts, which, at first sight, seem to be entirely distinct, are found to be intimate—all make the ear, in its normal and abnormal conditions, second to no part of the body in the great need of thorough description and careful study to enable the physician, who, wishing to treat diseases successfully, to grasp and comprehend that which is necessary to that end. The specialist certainly cannot do without this work, and the library of the intelligent general practitioner lacks much where it is absent.

MANUAL OF MIDWIFERY. Including the Pathology of Pregnancy and the Puerperal State. By Dr. Karl Schröder. Professor of Midwifery and Director of the Lying-in Institution in the University of Exlander. Translated into the English, from the third German edition, by Charles H. Carter, B. A., M. D., B. S., London. With twenty-six engravings on wood. D. Appleton & Co., New York; Bowen & Stewart, Indianapolis.

From Dewees down, various treatise upon obstetrics have been written—some good, others only passable. In some the therapeutics of pregnancy are usually treated of; in others, the anatomy of the parts receive more attention, etc., and it was not always the case that the latest was the best.

"Anomalies" of the various parts and processes seems to be the point of attention with this author, if we

should judge by the amount of space allotted to their considerations. It appears to be an average production throughout, with one serious fault, however, viz.: the smallness of type used. It would be hard on weak eyes to study it by gas-light.

LACERATION OF THE FEMALE PERINEUM AND VESICO-VAGINAL FISTULA. Their History and Treatment. By D. Hayes Agnew, M. D., Professor of Surgery in the University of Pennsylvania. With numerous illustrations. Lindsay & Blackiston, Philadelphia; Cathcart & Cleland, Indianapolis.

This is a reprint of articles appearing in the Pennsylvania Hospital Reports and *Medical and Surgical Register*, Philadelphia. The anatomy of the parts, with history of the subject, is followed by a description of the operation for the injury of laceration. Then the report of cases follows.

The more difficult to handle and serious subject of vesico-vaginal fistula is treated of at length. The literature of the subject, its history, causes, complications and various modes of treatment are given. The various methods of radical cure are classified.

Dr. Agnew made some slight but important modifications of the method of Simpson, and details cases illustrative of the application of the same.

Editorial.

WE propose to give a short history of the Medical Institutions of Indianapolis in the order of existence. In the fall of 1849 the Indiana Central Medical College held its opening exercises. This school was a branch of the Asbury University, of Greencastle, Ind., the trustees of which acted in the same capacity to the College. The Professors who were elected to the various chairs were: John S. Bobbs, Indianapolis, Anatomy; Dr. Baker, Cincinnati, Surgery; L. Dunlap, M. D., Indianapolis, Theory

and Practice ; Charles Downey, Greencastle, Chemistry ; James Harrison, Indianapolis, *Materia Medica* and Theaurapeutics.

During the session of 1849-50 forty students were in attendance, among whom were : J. S. Comingor, M. D., now Professor of Surgery in the Indiana Medical College ; R. N. Todd, M. D., Professor of Practice in the same, and the editor of this journal.

In the summer of 1850, the Medical School of Laporte, Ind., suspended, and two who were engaged in teaching there were elected to chairs in the Indiana Central—Dr. Deming to the newly-formed chair of Institutes of Medicine and General Pathology, and Dr. Mækes to fill the chair of Anatomy, Professor Baker having resigned the chair of Surgery, and Professor Bobbs having been elected thereto.

The last sessions of this school were held in 1851-2, at which time, in the wisdom of the trustees of the parent institution, an attempt was made to reorganize according to some pet scheme, but the school was exploded, and went to pieces like a neck broken St. Rupers-drop. From that time until the fall of 1869 a hiatus existed wherein were no medical schools, or, indeed, any institutions, even in a remote degree, connected with Medicine.

In the spring 1869, the Academy of Medicine, through the influence and suggestions of a few, took steps to organize an independent medical school. A committee was appointed who formed chairs and selected members to fill the same. The Academy adopted the report of this committee.

The following were the gentlemen selected to fill the various chairs : J. S. Bobbs, M. D., Principles of Surgery ; J. A. Comingor, M. D., Orthopedic Surgery and Surgical Pathology ; R. N. Todd, Practice of Medicine ; T. B. Harvey, M. D., Diseases of Women and Children ; W. B. Fletcher, M. D., Physiology ; R. T. Brown, Chem-

istry; Dougan Clark, M. D., *Materia Medica*; G. W. Mears, M. D., *Obstetrics*; L. D. Waterman, M. D., *Anatomy*.

A spring course was held, all the teachers taking part therein except R. T. Brown, M. D., who had been elected to the chair of Chemistry, in whose place the writer officiated.

During this term the College met a great loss in the death of Professor J. S. Bobbs, M. D., who, without disparagement of any of his associates, it can be said, was the real originator and maintainer of the institution.

The faculty was reorganized during the summer of 1870, J. A. Comingore taking the chair of Surgeon, a consolidation of his former chair and that left vacant by the death of Dr. Bobbs, while a new chair of Medical Jurisprudence, Toxicology and Analytic Chemistry was formed, with Thad. M. Stevens, M. D., as occupant.

Since that time the institution has been prosperous. Some few changes have taken place in the faculty. Dr. Waterman having resigned, Dr. R. E. Haughton, of Richmond, Ind., was elected to fill the vacancy, while the demonstratorship, vacant by resignation of Dr. C. Wright, was filled first by Dr. Dunlap, next by S. C. Tomlinson, M. D., and S. P. Calling, M. D. in succession.

In 1871, by mutual agreement, the school became a branch of the State University, of Bloomington, having, however, the control of its internal affairs vested in its own faculty.

That there should have been a medical school at this point during all the years intervening between the demise of the "Central" College and the commencement of the "Indiana Medical," is very evident. The fault was not in the lack of material to fill the medical school, and to facilitate instruction. It was the apathy of physicians of the State. The abortion of one school of medicine struck them with terror, only to be dispelled by the war—a calamity in many respects, a blessing in many. A med-

ical school or any other institution must have it elements homogeneous, and its controlling power vested in itself. It was the lack of such provision that dissolved the old "Indiana Central." Shall the "Indiana Medical" perish by the same means?

Up to 1870 there was nothing in the shape, or having a purpose similar to, a medical dispensary in Indianapolis, with exception of one or two private establishments that took the name for the purpose of deception, and thereby making money, from which the circulars of imposters, lauding their nostrums, were issued. A gift to the poor of the city, from Dr. J. S. Bobbs—who died in the spring of 1869—was made the nucleus for the establishment of "Bobbs Free Dispensary," its Board of Directors to be the faculty of the Medical College, having a Superintendent, Resident Physician and Druggist. The city and county appropriated a fund for its support, and, during the three years it has been in operation up to this time, more than five thousand patients have received medical and surgical assistance by its means. Before the establishment of this institution the medical attendance to the poor of the township was "let" to the lowest bidder—often low in price and powers—and, during the year 1869 \$80 was spent for medicines, the attending physician receiving \$220 for his services. Since that time \$1,200 have been spent each year for medicines. In a word, the poor were not properly attended to under the old and deceptive system of "lowest bids." During the session of the Medical College the dispensary affords ample material for the best of clinics.

As to hospitals, the city for a long time possessed nothing of the kind. Indeed, no attempts were made to establish one until 1858. At this time an attempt, successful in a small degree, was made by the late L. Dunlap, M. D., then a member of the City Council, to have the city build a "City Hospital." A beginning was made, a

small building finished, and then all dropped, still born. The wind soon whistled through the broken panes of glass, and the frost and rain in turn covered the floors. No sick ever knocked at the weather-beaten door for admittance, and, therefore, no provision was made for their reception. This continued until the war commenced. New life surged into the old walks; energy appeared where apathy reigned. The building was enclosed, equipped, and filled with sick and wounded, and became one of the many hospital centres of the city. After the war had ceased and the military authorities were done with it, decay and silence again claimed it as their own; the roving swine and cattle passed to and fro through its dismantled gates, and it became an eye-sore to the city. It was not until the demand of the physicians of the city arose to a clamor that the City Council promised to aid in furnishing and equipping it in the interest of the city's poor. This step was finally taken by them in 1867, since which time its wards have been filled by those deserving such attention. From forty to eighty beds, according to the season of the year, are occupied. The corps of officers are, a Resident Physician and his assistants. First in order, as Resident Physician, after its opening, was G. V. Woolen, M. D. Then Dr. Hadley, Joseph Marsee, and Dr. Davis, who, at this writing, occupies that position. It was at first controlled by a Board of Commissioners elected by the Council—one from each ward of the city; at present, by a Board of three Trustees—P. H. Jameson, M. D., Theophilus Parvin, M. D., and R. N. Todd, M. D. By this institution, together with that of Bobbs Dispensary, ample clinical material is afforded for the Medical College.

[To be continued.]

THE following circular has been issued to the "Physicians of Michigan," by Henry B. Baker, M. D., of Lansing, Secretary to the Michigan State Board of Health:

"DOCTORS—Your careful attention is respectfully called to the subject of section 1735, Compiled Laws of 1871, which reads as follows: 'Whenever any physician shall know that any person whom he is called to visit is infected with the small-pox, or any other disease dangerous to the public health, such physician shall immediately give notice thereof to the Board of Health, or health officer of the township in which such diseased person may be; and every physician who shall refuse or neglect to give such notice shall forfeit, for each offense, a sum not less than fifty nor more than one hundred dollars.'"

"By referring to the following statement of the deaths from certain contagious or infectious diseases in this State, during the years 1869-70, you will be able to judge approximately as to the relative 'danger to public health' connected with these several diseases.

NUMBER OF DEATHS IN MICHIGAN FROM CERTAIN "DISEASES DANGEROUS TO THE PUBLIC HEALTH."

DISEASES	YEAR	
	1870.	1869.
Small pox.....	9	42
Scarlet Fever.....	852	252
Typhoid Fever.....	574	437
Measles.....	56	147
Whooping Cough.....	119	158
Total	1,610	1,036

"It will be seen that some other diseases are at present attended with very much more danger to life, as well as to health, than is small-pox. It is believed that very many of the deaths here recorded might have been prevented by the same means (excepting vaccination) which were generally employed in the case of small-pox. In other words, with the exception of vaccination, the same methods now employed in cases of small-pox, if applied to the prevention of these other diseases, should reduce the deaths from scarlatina, for instance, from 852 down more nearly to the number from small-pox, thus saving, in each year, the lives of several hundred children.

"In order that the State Board of Health may study to good advantage 'diseases dangerous to the public health'

*Section 1734 provides that all householders shall give a similar notice, or "forfeit a sum not exceeding one hundred dollars."

it will be necessary for the local Boards of Health to report the facts concerning them; and this they will be able to do if the physicians throughout the State will be as particular to report these diseases to the local Boards of Health as they have heretofore been to report cases of small-pox. Without doubt this will sometimes be quite a tax upon the time of the physician, but, even during epidemics of these diseases, each physician can, by using postal cards, or some such method of notification, quite easily give to the local Boards of Health a knowledge of every case of 'disease dangerous to the public health' occurring in his practice. If it is proper and desirable that a fee should be paid to the physician for each case reported for record, a law should be passed providing therefor; but the provisions of the present law are imperative, and are also important to the interests of the people, and should be faithfully executed, for a central Board can undoubtedly make the knowledge obtained in this manner of use in preventing sickness and deaths.

"Herewith please find copies of a sample blank for your use in notifying the clerks of your local Boards of Health. The law simply requires that you 'immediately give notice,' etc., but if you will add the other items suggested, it is believed you will advance the interests of public health and merit the gratitude of the people.

"By direction of the State Board of Health.

"Very respectfully,

"HENRY BAKER, M. D., *Secretary.*"

Perhaps it would not be out of place to give a few extracts from the laws of Michigan, referring to this question. They are worthy to be copied—perhaps improved upon—by our own lawmakers. Sections 1734 and 1735, Compiled Laws of 1871, are as follows:

"(1734.) SEC. 43. Whenever any householder shall know that any person within his family is taken sick with the small-pox, or any other disease dangerous to the public health, he shall immediately give notice thereof to the Board of Health, or to the health officer of the township in which he resides; and, if he shall refuse or neglect to give such notice, he shall forfeit a sum not exceeding one hundred dollars.

"(1735.) SEC. 44. Whenever any physician shall know

that any person whom he is called to visit is infected with the small-pox, or any other disease dangerous to the public health, such physician shall immediately give notice thereof to the Board of Health or health officer of the township in which such diseased person may be; and every physician who shall refuse or neglect to give such notice, shall forfeit, for each offense, a sum not less than fifty nor more than one hundred dollars."

As showing the manner the State Board is co-operated with by local Boards of Health, we extract as follows:

"It shall be the duty of the health physician, and also of the Clerk of the local Board of Health in each township, city and village, in this State, at least once in each year, to report to the State Board of Health their proceedings, and such other facts required, on blanks and in accordance with instructions received from such State Board. They shall also make special reports whenever required to do so by the State Board of Health."

"Section (1692) 1, of Chap'er XLVI., Compiled Laws of 1871, provides that 'The supervisor and justices of the peace of every township, respecting which no other provision is or shall be made by law, shall be a board of health for their respective townships, and the Township Clerk shall be the clerk of such board, and shall keep a record of their proceedings in a book to be provided for that purpose at the expense of the township.' Your account for services and expenses in connection with your reports to the State Board of Health, should also be allowed by your local Board of Health, as for services of its clerk.

"Section (1740) 49, of Chapter XLVI., Compiled Laws of 1871, provides that 'The Mayor and Aldermen of each incorporated city, and the President and Council, or Trustees, of each incorporated village, in this State, shall have and exercise all the powers, and perform all the duties of a Board of Health, as provided in this chapter, within the limits of the cities or villages respectively, of which they are officers.'"

THE fifth session of the Indiana Medical College opened with an increased attendance. The opening address was delivered upon the evening of the 14th by Professor W. B. Fletcher, the subject somewhat rambling, but having

for its gist a contrast between American and European schools and modes of teaching, with a side thrust at refined science, and a nod of approval to old "Personal Experience," be he clad in homespun or broadcloth. May the winter pass with both pleasure and profit to both teachers and students. We are not yet able to say what effect, if any, the "financial flurry" may have upon medical schools. We apprehend not much, for, as a rule, they who generally attend have reached the "worst" point—a position where nothing can hurt them. "They are secure from the storm blasts in their sheltered haven." Their ships are safe, or, in military parlance, they are in "the last ditch." This is, perhaps, as it should be, for, if wealthy—slothful; if poor—industrious.

WE see that our veteran (though not ancient) friend, E. B. Stevens, editor of the *Lancet and Observer*, Cincinnati, is about to retire from journalistic labors and remove to Syracuse, New York, we presume, for the purpose of teaching in that city. We hope his *call* will, in a short time, fill him even with greater honors and emoluments than his present *habitat* and occupation has. We may be permitted to doubt it, however. The *Lancet and Observer* is one of the ablest journals in the country, and has for years out of mind been conducted ably by Dr. Stevens. We shall wait and see how well his place can be filled.

DR. J. M. SMITH, of Charles City, Iowa, has written a valuable article upon "Position in Labor," in which he advances some new ideas. A few extracts from it will be found in the "Miscellaneous Department."

THOMAS MILLER, M. D., died in Washington, D. C., September, 20th, 1873. The Doctor was 67 years of age.

Miscellaneous.

DETERMINATION OF POISONOUS VEGETABLE SUBSTANCES FOR FORENSIC INVESTIGATIONS.—The writer proposes chloroform as a very important and easily applicable test reagent for distinguishing between the various vegetable alkaloids. From solution in sulphuric acid the following substances are gradually withdrawn by repeated agitation with chloroform.

In order to apply the alcohol test, the object is cut up, warmed to 75° C., heated with water containing sulphuric acid, and the solution digested at that temperature; the insoluble residue is pressed off and repeatedly extracted with warm water. The acid extracts thus obtained are nearly neutralized by bicarbonate of soda till only a slight acid reaction remains, and then evaporated in a water-bath to a thin syrup. This is mixed with four times its volume of 90 per cent. alcohol, and after twenty-four hours, warmed to 40° or 50° C., filtered off, and the residue extracted with alcohol. From the alcoholic extract the alcohol is then completely distilled off. The residue of distillation is filtered, chloroform added, and then ammonia, till there is a distinct alkaline reaction, and the solution is then repeatedly agitated. The chloroform solution is then separated, and the alkaline fluid extracted with fresh portions of chloroform, until no residue is left on evaporating a small portion of the liquid. The alkaline fluid is in the meantime placed aside, and all the chloroform solutions several times agitated with fresh portions of water containing sulphuric acid. The chloroform is separated from the sulphuric water, the latter neutralized with ammonia, and then shaken again several times with chloroform. The chloroform solution now obtained is passed through a filter moistened with chloroform, washed with chloroform, and

evaporated. The residue that remains behind is tested for all those alkaloids which have been mentioned above as being extracted from an alkaline solution by chloroform. The alkaline aqueous fluid that was placed aside is treated with a fresh quantity of chloroform and dilute sulphuric acid till it becomes acid, again agitated with chloroform, and the chloroform separated and evaporated. Any picrotoxine that may be present and the remainder of the colchine remain in the residue. On the now acid aqueous fluid is poured a stratum of amylalcohol, the solution made alkaline with ammonia, and shaken, the amyl-alcohol taken off, filtered, and evaporated; all the morphine, digitaline, and solanine, and the greater part of the remainder of the saba-dilline, narceine, and picrotoxine will be found in the solution; in the residue, after evaporation, a small quantity of the narcotine, caffeine, papaverine, theobromine, digitaline, and colchine. The first extract with chloroform is now evaporated, the residue repeatedly extracted with warm water containing sulphuric acid, the acid fluid neutralized with ammonia and agitated with chloroform. The remainder of the substances will remain after evaporation of the chloroform.—*The Druggists' Circular and Chemical Gazette*.

POSITION IN LABOR.—The philosophy of position is based upon gravity and muscular action, including contraction and relaxation. The key-note, or axiom, so to speak, of correct position, is the fact that the fundus of the gravid uterus, in its normal state, is *movable* to a certain extent in nearly all cases, when not obstructed. The field for the application of this principle is almost unlimited, and will vary to some extent in every individual case.

Suppose that we cannot tell the exact presentation, or that we can, and in either case that the presenting part is found to impinge or press most strongly upon or towards the *left* side of the pelvis, and even while the os

does sometimes point, so to speak, the *right* side of the median line of the pelvis. These two things occurring together may be said to be contradictory, and they do appear so at first observation—that is, the os inclining to the right, and the bulk of the fœtus to the left side of the pelvis. To decide accurately, before or after the full dilatation of the uterus, a gentle upward pressure of the fœtus by the finger, between pains, will often be necessary. The finger can then be passed from side to side, and thus determine *which side of the pelvis is most filled or pressed upon by the presenting part*. If, as supposed, the presenting portion presses most directly upon, or to the left side of, the pelvis, and, as stated, independently of the position of the os, that side—upon the left—is the position in which it will uniformly be found in practice best to place the patient; if to the right, the position should be upon that side.

To epitomize or briefly recapitulate the foregoing directions: Most cases have a lateral obliquity or pressure, so to speak, and if the presenting part crowds upon, or most nearly fills one side of the pelvis, then upon that side is the position. If towards the hollow of the sacrum, place the woman upon her back, elevate the hips, and, if necessary, use external pressure. If towards the sacrum, and one side, better place her upon that side, observing the arm is in position; and, if necessary, apply the bandage and support the back. If upon or towards the symphysis pubis, place her in a kneeling and almost horizontal posture, and, if necessary, upon the knees and face for a short time.—*Extracts from article "Position in Labor" by Dr. Smitl, Medical Examiner.*

GLYCERIN AS A MEANS OF DISGUIISING MEDICINES.—We desire to call the attention of our readers to the use of glycerin as a means of disguising medicines, especially those of an oily nature. Some time since it was an-

nounced that if castor oil be mixed with an equal part of glycerin and one or two drops of oil of cinnamon to the dose, it can scarcely be recognized. We have used this mixture a great number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty. We have given it to doctors without their discovering that they were taking castor oil.

In typhoid fever and other diseases in which turpentine is indicated, patients often object very much to its taste. The addition of half an ounce of glycerin to a six-ounce emulsion disguises almost completely the turpentine, especially if a drop of oil of gaultheria or of other volatile oil be added for each dose.

No doubt the principle is capable of wide extension. It is said that cod-liver oil may be disguised with glycerine and whisky; and Dr. Aerbest L. Snow, writes to the *British Medical Journal* that an addition of a small quantity of glycerine (about half an ounce to an eight-ounce mixture) will altogether obviate the sensation of astringency produced by the chloride of iron dissolved in syrup.

Oil of gultheria with tincture of quinine will disguise oil effectually.—ED.

A NEW CHEMICAL LABORATORY.—Early in the spring of 1872, Messrs. Billings Clapp, & Co., laid the foundations for a new chemical laboratory at Newton Lower Falls, on the Charles River. At the time of the great fire, the buildings fortunately were approaching completion; and during the winter, by great exertions, some departments were finished and put in operation. But it was not until late in the past summer that laboratory work was resumed in all its various branches. The labor of equipping and placing in running order a chemical laboratory designed for the production of more than *two hundred* different substances is immense, and well calculated to

task the inventive and constructive powers to the utmost.

The experience, skill, patience, and ingenuity needed to conduct successfully industrial chemical processes are greater than are demanded by any other pursuit; and the measure of responsibility is also greater, as without the utmost accuracy and nicety of manipulation disastrous failures must result.—*Boston Journal of Chemistry*.

A VALUABLE CEMENT.—The following is a useful cement to fasten objects of wood to others of metal, glass, stone, etc. Good cabinet-makers' glue, is warmed up with water to the consistency necessary to connect wooden objects; then add enough sifted ashes to bring it to the thickness of a varnish. The cement should be applied to the surfaces of the objects to be united when warm, and then they should be pressed together tightly. After cooling and drying, the surfaces are so strongly united as to require great force to separate them. Grinding stones fastened on wood, and handles to painters' stones for grinding colors, have been used for more than a year without exhibiting any appearance of fracture.

HOW TO DEPRIVE IODINE OF ITS STAIN.—*La France Medicale* says: Add a few drops of carbolic acid to the tincture, and it will not stain; moreover, the tincture is more efficacious, and its action more certain. M. Bogs recommends the following formula for use in injections: Alcoholic tincture of iodine, three grams; distilled water, one hundred and fifty grams. This preparation is superior to all others in the treatment of blenorrrhagia and leucorrhœa.

WEANED FROM HYPODERMICS.—A young lady who had been accustomed for a long time to the use of opium, applied to an eminent physician to make hypodermic injections of morphia. He commenced by making the

injections as desired, of morphia and water; by degrees the quantity of morphia was lessened without her knowledge, until within a few days nothing but pure water was injected; after each injection she would lapse into a quiet sleep, in the same manner that she had been accustomed to when under the actual use of morphia. This treatment was continued for several months, during which time tonics had been used, to strengthen the system and bring about a healthy condition after being so long a time under the influence of opium. When he considered it safe to do so, he told her plainly that she had not taken a particle of morphia for several months, and was entirely free from its influence; this statement of course was received with intense surprise, as well as unbounded joy. The lady is to-day entirely free from any desire for opium.

We give below the formula for an "anti-opium pill" which has been used for several years in the English hospital at Peking, China, and its efficacy proven in numerous instances, but of which we have no actual knowledge:

R Henbane $\frac{1}{4}$ grain, Gentian $\frac{1}{2}$ grain, Quinine $\frac{1}{4}$ grain, Ginger $\frac{1}{2}$ grain, Camphor $\frac{1}{2}$ grain, Cayenne $\frac{1}{2}$ grain, Cinnamon $\frac{1}{2}$ grain. Soap and syrup for coating. Three pills a day.—*London Druggist*.

ON PECULIAR MODES OF TRANSMISSION OF SYPHILIS IN MARRIED LIFE, BY VICTOR DE MERIC, F. R. C. S.—The author passed first in review the modes in which a wife may be contaminated by her husband, *vice versa*; paying particular attention to those cases where no outward signs of syphilitic taint are apparent. He alluded, then, to the share of gestation in the mechanism of the contamination of the wife, observing that impregnation is not the only mode in which she may become affected with the complaint. Numerous facts had put beyond doubt the modes of transmission just alluded to; but he had met with cases where contamination had been ef-

fect in an exceptional manner. The author then related some of his exceptional cases. The first had reference to a gentleman who had been under his care several years before his marriage, and had passed through the usual periods of syphilis. He married eighteen months after the last symptoms, and a series of healthy children were born. That father suffered now and then from inpetigo, and had once very severe osteitis; but neither the wife nor children experienced any contamination. About ten years after marriage, the husband was indiscreet, and caught a chancre which subsequently became phagedenic. Considering the lesion, at first, as a mere abrasion, he took no precautions, and the result, unfortunately, was the breaking out of a fearful set of symptoms of syphilis in the wife. The author now asked whether this case did not prove that the secretion of a soft chancre, seated in a syphilitic individual, might convey the general disease; and added a few remarks as to the effects of pathological secretions from a person suffering, or having suffered, from syphilis. The second case was illustrative of great difference between occasional intimacy and the actual bonds of marriage. In this case the disease was conveyed from wife to husband, though no such accident occurred through several years of former intimacy. The third case related to a married gentleman, who caught a chancre which eventually proved indurated. The lesion was, however, so insignificant at first that no heed was taken. The wife was far advanced in pregnancy at the time, and the consequence was that fœtus and mother were contaminated. These facts would go far to prove how infectious was the chancreous erosion in its nascent state. The fourth case was of a remarkable kind, as the gentleman suffered from systemic syphilis without having ever presented a primary sore. Here the wife escaped at first, but eventually had the disease through her infected child. Mr. De Meric alluded subsequently to a few other cases, in which mothers and numerous children remained healthy, though the husbands suffered from syphilis before and after marriage.—*Medical and Surgical Reporter.*

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CHOLERA INFANTUM.

BY M. J. HOADLEY, M. D., DANVILLE, IND.

Read before the Hendricks County Medical Society.

This disease, according to the authors, has created but little or no excitement in any country, save that of our own. And in fact, it has next to no journalistic literature, even in our own land.

I was wonderfully disappointed when I sought to ascertain what my professional friends had been writing about this disease for the last series of years, to learn that they had ignored the malady almost altogether. Notwithstanding all this there is a disease, as thousands of our physicians throughout the United States can attest, even if they have failed to do so, that we designate cholera infantum. And at the same time that this has been regarded a disease peculiar to the United States by a majority of those that have spoken out upon the subject; others of no mean reputation contend that other countries are not altogether exempt from the ravages of this disease. And it would seem to be a very natural conclusion, that under the circumstances of age, season, surroundings, etc., this disease, as

many others, is no respecter of persons, neither is it of nationalities. But in all countries, and at all times, where hot summer suns are endured, and filthy cities, with humid basements and crowded garrets, are inhabited, the people are not altogether ignorant of the disease under consideration. Look if you please at the mortuary records of any of our large cities for the months of July, August, and September for the last few years, and surely we can come to no other conclusion, than that this want of journalistic literature on the subject is not because the disease is of minor importance. The diagnosis in a large majority of cases is not difficult, almost from the very inception. The transition from apparent health to frightful disease, in a majority of cases is sudden and well marked. But a few moments since the child was playful and sprightly, whereas now it assumes the phase of terrible agony.

Probably the first symptoms observed, is that the child has a copious evacuation of the bowels, attended with cries of distress, contractions of the abdominal muscles, some tenesmus, and incessant jactitation. These symptoms continue in a greater or less degree, for an indefinite length of time, according to the nature of the attack, in any particular case. The evacuations are usually large, frothy, liquid, and but little changed from the natural color in the early stages of the case. As the case progresses however the color changes in a majority of cases to a light green, and at the same time the consistency of the evacuation begins to change, assuming a shready and mucus appearance. These evacuations vary greatly in point of frequency, from a few moments to even hours. Coincidentally with this state of affairs, nausea and vomiting speedily set in, and in fact, in many cases this is the initiatory symptom in the case. Whether the one or the other of these symptoms claim priority in a given case, they are both present sooner or later, in the course of almost all acute

and grave cases. Almost every thing taken is speedily rejected; milk that had been taken into the stomach but a few moments comes up a solid coagula with terrible retching, muscular contraction, cries of distress, etc., etc. These symptoms continue for an indefinite length of time, each striving with the other for the ascendancy in a certain proportion of cases, and in other cases the one or the other of the symptoms may predominate from the inception of the disease, or supplant the other at any stage of the case. Usually the emesis is more transient in its duration than the diarrhoea. Febrile excitement is not usually very high, but variable. The head and abdomen are generally hot, and extremities cold or cool. In many severe cases you observe the little patient lying before you, even at an early stage of the case, with a pale and collapsed look, the fluids of its body fast leaking out; stasis now begins to set in; the extremities begin to grow colder; the brain sympathizes; the blood deprived of its fluid parts is filling up the capillaries of the brain and surface, and in fact the different organs of the body are deprived of a healthy capillary circulation, hence the surface that so recently was florid with health and vigor, is soon changed to that of the pallor almost of death itself, and begins to assume a dusky or dirty appearance. The engorged condition of the capillary circulation is now seen in the conjunctiva. The brain is now sympathizing to such an extent as that the casual observer may refer the original trouble to that organ. As the fluids of the body are thus being so rapidly passed off, the cries and entreaties for diluents of almost any kind are heart rending.

The tissues are shrinking in a frightful manner. The elastic condition of the surface of the body is fast giving place to inelasticity, so that the integument will now stand in folds as you place it. The eyes from day to day, or it may be from hour to hour, are falling farther back

into the already deepened orbits. The abdominal parietes are either tympanetic or collapsed. The latter condition has been present in a majority of grave cases seen by the author, and especially is this true in the latter stages of the malady.

As the case progresses, the features become more and more pinched; the nose sharp and pointed, the lips unusually thin, the integument of the forehead smooth and shining, the eyes glassy, and half closed while asleep, and the sensibility so blunted that flies may crawl over the balls unobserved by the patient. The urine of course will usually be scant and highly colored, with so large an egress of fluids at the other avenues of the body. The tongue, early in the case, is moist, with a thin white fur, especially at the back part; later in the case it assumes a brown appearance at the back and center, red and dry at the tip and edges. The crowding of the fingers, or it may be the whole hand into the fauces, as if to remove some offending substance therefrom, has been observed by the author in a majority of grave cases, especially in fatal ones.

These are among the most important symptoms of a typical, acute, and grave case of the malady under consideration. Such a case may succumb within 24 hours from its inception, or it may continue a few days without any decided modification in the symptoms, and then tend toward dissolution, or recovery, according to the powers of endurance of the patient, the gravity of the attack, or the remedial measures brought to bear in the case.

But a considerable number of cases assume more of a chronic form from the commencement of the disease; others assume such character at the subsidence of the acute symptoms; in these, the important symptoms are much the same as those given above, except in point of speedy or tardy development. In the one class of cases we have an unmasked antagonist before us, we appre-

ciate the situation, and as judicious practitioners enter into an open contest for the mastery in the premises. In the other we have a foe from the simple reason of the insidious nature of his attack, that is worse than the other. Let your minds revert with me to the sick chamber; the case has attracted but little attention even from the immediate friends of the patient, probably several days have elapsed before a physician is consulted. On a given day our little patient had some nausea, or vomiting, probably both. On the succeeding day was better. On the third day had diarrhœa, probably a continuation of the nausea and vomiting; has been more or less feverish from the beginning of the attack, at the same time has manifested a considerable degree of restlessness; and so the case passes on, we hear from it occasionally, probably see it occasionally. The hygienic surroundings of the little sufferer are not just such as we would desire. The mother poorly nourished, and subject to badly ventilated, damp and dirty apartments, it would be unreasonable to suppose that she under such circumstances can supply milk that will be properly digested, and assimilated by the babe.

We pass on, apace; our patient now better, and then worse. The most noticeable feature of the case that gives us suspicion of final danger, is the loss of flesh, which has slowly, though steadily gone on, together with a seemingly mild manifestation of a portion of the symptoms given above, until our patient is in the most critical condition.

This, gentlemen of the Society, is the class of cases that gives us the most trouble. We fail in a measure to get ourselves enlisted in the case, or we fail to get parents and friends enlisted as we should, at the proper time. The case seems to be free from immediate danger, and we feel a little too modest to urge the necessity of placing the child under strict hygienic regulations for the remainder of the hot months of the season. We are

satisfied to hear from the patient occasionally during the exacerbations, and prescribe such remedies as seem demanded at the time, and lose sight of the case at the time when our services would be most valuable.

What has already been said, would intimate that as causes of the disease, heat, age, dentition, humidity, decomposing animal matter, and errors of diet, are among the most noteworthy.

To have the disease raging in its most frightful manner, it is necessary to have several of these conditions, or causes, present. In the rural district, as in the crowded city, they have the hot summer suns, they have whatever of predisposition, age, or dentition can give. They have also the ordinary atmospheric changes, as regards humidity. The mothers inhabiting such districts, are not usually more careful with regard to the artificial nourishment of their offspring, than are those in towns and cities, and consequently as they of the rural districts enjoy a measure of exemption, it follows that other causes must co-operate with those already given, to cause the most frightful manifestations of the disease.

We observe that like Asiatic cholera, diphtheria, dysentery, and typhus fever, in a word all that class of disease we designate zymotic, cholera infantum seeks out of city, town, or country, those parts of each for the full development of its worst phases where sanitary regulations are unobserved; where the offal of cook rooms are exposed to the heated rays of summer suns; where crowded basements are badly drained and ventilated; where squalor and privation abound, and the none too pleasant odors of badly arranged privies, pork houses, and as Aitkin says, "where glue factories perfume the air." With such surroundings as these, without and within, the mother's milk, if it be supplied at all, is evidently very deficient, both in quality and in the essen-

tial elements of nutrition and assimilation; and if it be not supplied, articles altogether unfit for those of so tender an age, are apt to take its place.

Once upon a time in the rural districts of Hendricks county, I had a hard struggle to save a little boy of some fifteen months, from the ravages of this frightful disease. I had given the mother "line upon line, and precept upon precept," relative to clothing, diet, cleanliness, and therapeutics, and in fact in everything that I considered essential to the restoration of the little patient to health again. It was a long and hard struggle, and also a gratuitous one on my part, and the scales that for so long a time had so nearly stood on a balance, finally began to turn in our favor. A few days after I had dismissed the case, and when autumnal frosts were hard by, I was passing that way, and being in a hurry I thought to pass by unobserved, but not so, for soon I observed the mother approaching me with the babe on her arm, while it was regaling itself in fine style on a cabbage-stalk. Of course she wished to talk to me about the continued relapses of the babe, and of course I thought she was a monster of the most gigantic proportions, and made a few remarks to her relative to what I thought was proper diet for babes, and especially for those just recovering from so terrible a disease. Feeling my utter incompetency to do the subject justice, I preferred to just submit it with these few remarks, and pass on, and for ought I know the baby still lives, and while with the old adage, we admit that all is well that ends well, we ask ourselves the question, is it remarkable to suppose that a change more allied to fermentation than healthy digestion and assimilation, will take place in those of so tender an age, while subject to so many patent causes of disease?

Not having had the opportunity of witnessing the pathological conditions of a single case of the disease, I feel that it would be unwarrantable in me to occupy the time of the Society to any considerable length on this

part of the discussion. Suffice it to say, that the most constant microscopic changes are found in mucus membranes of the stomach and intestines. These changes are, in the main, "congested patches," "dark livid spots," "coagulable lymph," "thickening of the coats of the intestine, so as largely to diminish the calibre of the passage in many parts," "enlargement of the solitary follicles, and occasional ulceration of the same," "congestion of the brain and its meninges, also effusion into the ventricles," "the liver congested to such a degree as to occupy two-fifths of the entire abdominal cavity."

Though of 37 cases carefully examined by J. Lewis Smith, as quoted by Aitken, "no evidence that the liver was affected, either as to size, or in any way involving any modification of function," these are the most noticeable pathological conditions that have been observed by such lights in the profession, as "Aitken, Flint, Jackson, Horner, Baxter, Lindsley, Hollowell, Stewart, and Dunglison." And as for convenience sake we classify the disease as gastric, intestinal, gastro-intestinal, and cerebral, and from the symptoms of any particular case during the different stages of the disease, we would expect to find a corresponding lesion after death; but as intimated above, just what changes of structure are expressive of the real pathology of the malady, and those that have been developed during the cause of the same, and have their origin in the inanition consequent upon the disease, the present advancement of the science will hardly justify me in assuming. I think we may safely say, however, that all lesions of structure other than those found throughout the alimentary canal, are of secondary importance in the premises. The congestion of the liver, the congestion, softening and effusion into the brain, all exist as such from the simple fact that the tissues are in a state, so to speak, of starvation. The metamorphosis and elimination of the tissues are increased a

hundred fold and the supply cut off, a profound collapse sets in, a state closely allied to paralysis of the circulatory system, hence congestions. Also a loss of balance between endosmotic and exosmotic currents, and consequently large effusions into, and softening and melting away of the tissues, and in aggravated cases death is the consequence.

What I had thought to say of prognosis and prophylaxis, has in a great measure been anticipated while treating of the causes and symptoms of the disease, so that according to my present arrangement of the subject, it only remains for me to speak in brief of the remedial measures that seem most worthy of our consideration while treating the same. Many of the milder cases, and especially those having their origin in the administration of improper articles of diet, yield readily to a mild and rather expectant line of treatment. Under such circumstances give a dose of oleum risini and terebenthina, if the stomach will tolerate it a sufficient length of time, but this will hardly be the case if the gastric element of the disease largely predominate, the remedies will be rejected too soon to produce the thorough revulsive effect upon the lower part of the alimentary canal that desired.

In this class of cases, enemaes of chloride of sodium, according to the plan of Dr. Dewees, has met my most sanguine expectation, thus quieting the stomach so that any of the milder articles of the materia medica will be retained a sufficient length of time to produce the desired effect. Also in many of these milder cases, where acidity is a leading feature in the case, subnitrate of bismuth, calcined or carbonate of magnesia, have been given with good effect, especially after the revulsive effect has been had, as intimated above.

The bisulphites of soda and potassa are spoken highly of by some, to check the fermentation that is taking the place of healthy digestion and assimilation, and at the same time, that I have no experience to offer as for or

against the remedies, I entertain a very favorable opinion of them, in the class of cases that we can afford to risk a rather expectant plan of treatment. Opium and its preparations in this, as in almost all other diseases, has its advocates as well as its decriers. At the same time that I have failed in a great measure to observe the curative effect of the remedy desired; in that class of cases attended with restlessness, cries of distress, tenesmus, etc., etc., in my hands it has had a happy effect; restoring quietude, and in many cases inducing a balmy sleep to the little care worn sufferer, that was truly gratifying to me and beneficial to the patient. Astringents, both vegetable and mineral, combined with absorbents, occupy a prominent place in the catalogue of remedies employed at all stages of the disease. In cases with the intestinal complication predominating, they have served my purpose well, even in the early stages of the disease. The ordinary chalk mixture, tr. catechu or kino, aromatic syrup rhei, camphorated tr. opi, in such combinations and doses as would seem adapted to the age and condition of the patient, have frequently restrained to a considerable extent the large loss of fluids, without materially interfering with other and more important indications of treatment that may have been pursued at the same time in the case.

But I desire to call your attention to a class of cases more particularly, wherein to temporize with remedies like those above mentioned would be, in my opinion, madness in the extreme. In all alarming cases in the acute stage, and those of exceedingly mild character, wherein remedies such as the above have failed to have the desired effect, resource is had at once to the mild chloride of mercury, in minute and frequently repeated doses, not only until the emesis is controlled should that be the leading feature in the case, but until the liquid, frothy, and offensive stools give place to those of dark green, bilious, and those of greater consistency.

The time that it takes to accomplish this varies greatly, from hours to even days, according to the severity of the attack. So that if we seem almost at the point of despairing, let us remember that this is the class of cases that demand perseverance and promptness in the administration of whatever remedies may be brought to bear in the case, if success is to crown our efforts at last. And at the same time that I regard this as the sheet-anchor in this class of cases, I frequently combine other articles with it, according to the particular indication in the case. The compound chalk mixture spoken of above, ipecacuanha, doveri or opii, and its salts all frequently have their important auxiliary stations in the treatment of the case.

The time allotted me here is too short to enter into a lengthy discussion of the question, whether the liver is in a state of engorgement, or whether the remedy produces its salutary effect by virtue of its aiding the biliary secretion, or whether it is not more likely that the benefit we derive from its use comes through its action on the exhalants and absorbents throughout the course of the alimentary canal, even if I had the ability and inclination to do so, so I will reserve this part of the subject for the discussion that shall follow. Warm alkaline baths, carefully repeated at intervals of 12 to 24 hours, followed up by brisk frictions and the application of soft flannels to the body, has in my hands done much in restoring the equilibrium of the circulation, which surely is a matter of momentous consideration to the little sufferer. One other suggestion I have to make, and then I shall have said all I desire, relative to the treatment of the acute form of the malady. And here, as upon almost every other point of this discussion, I tread upon controverted ground. At the same time that I recognize the urgency of the demands of the system for diluents to supply the place of those lost by leakage of the disease, I also think the instructions

given by many of those in high stations in the profession, to allow such patients to gratify their desire for cold water, especially in the gastric form of the disease, are in many instances defeating efforts and appliances, that would otherwise save many from untimely graves. And I will say further, just here, that until this irritability is subdued in a great measure, whether it takes hours or days to accomplish it, cold drinks in any considerable quantities, are out of the question. What purpose, I ask you, can they serve, only to increase the already irritable condition of the stomach? Digestion is at an end for the time being, so that the mother's milk, if taken in any other than the smallest quantity, is almost instantaneously rejected, and cold water is apt to have no better reception, in nine cases out of ten even a worse one. Then what advantage can we expect to gain by supplying these articles in large quantities with no power to digest or assimilate them? But you answer by asking me how I resist the entreaties of these little famishing, starving patients. I answer, that if a large portion of the fluids and nourishment is withholden from them, from the inception of the disease, a major pathological condition that to these demands and entreaties, will in many cases be averted. Digestion and assimilation will sooner and more surely take the place of fermentation, than would otherwise be the case, when proper quantities of nourishment and liquids may be administered with safety. In all cases, and at all stages, when thirst and irritable stomach are urgent, I have found good strong coffee, in teaspoonful doses, repeated at intervals of from 20 minutes to an hour, according to the urgency of the symptoms and the tolerance of the remedy, answer my purpose better than any article that I have found. This I give warm, and without cream or sugar.

As this paper has already grown to such an unardonable length, I am compelled to omit a greater part of

what I would like to say relative to the treatment of the chronic form of the disease, which, by the way, is the most important part of the whole investigation. Here we usually find the intestinal complication largely predominating. The treatment is hygienic, dietetic, and therapeutical. A sedulous avoidance of all causes of the malady should be observed as far as possible. Warm, soft, flannel underclothing for those of so tender age, I fear is only appreciated at half its worth, notwithstanding the many exhortations mothers and grandmothers have received at the hands of their medical advisers for the last few years. Occasional sponging, with stimulating baths, and keeping the patient out in the open air a portion of each day, when the weather is dry and pleasant, are suggestions that when judiciously and faithfully followed, have universally produced the best of consequences, in every instance when I have adopted them.

But the question in my opinion, upon which our chances of success or failure hangs in these cases, is the nourishment of the patient. Powder drops, cordials, astringents, tonics, all are as nothing if we fail to have the patient carefully and properly nourished. And gentlemen of the society, think you that we as guardians of the life and health of those who are so soon to take our places in society, or go down to premature graves, have fulfilled our vocation in this respect to the measure that it was our duty to do? Are mothers informed on these points as they should be? Are not the terms engorgement, digestion, and assimilation, by too many of them regarded as synonymous?

Do not you, my brethren, frequently receive summons to see little patients, whose wasted and sunken forms tell more plainly than words can do what amylaceous, and crude and vegetable diets and fruits can do, when administered to them with a liberal hand? I have in my mind's eye a typical case. Four of us, all members of this

society, sat in a parlor, where opulence seemed to reign, holding converse over a sadder looking patient than whom you or I scarcely ever beheld. The little boy told his tale, by his next friend the nurse; it was a tale of green beans and potatoes. We all feared that they had done their legitimate work, but not so, for the boy still lives. A monument of the potency of beef tea, ferruginous, and vegetable tonics, as remedial agents in this disease.

The mother's milk first, if supplied in proper quantity, and of good quality, is a maxim too trite, to require repetition here. Next imitate it as near as possible. Select a fresh cow, known to be of good butter-making qualities, have her well cared for in a comfortable stable, fed on dry feed of good quality instead of washy second growth clover, have the milk taken three times daily, and use only of the last half taken, which will usually be sufficiently rich in the oil globules without waiting for separation, as is usually the custom. For those of very tender age, I generally recommend a fourth part of water, the latter to be left off at the end of four to eight weeks, according to circumstances. The addition of sugar of milk, or the ordinary white sugar, as is the custom of the good old ladies of the neighborhood, is a disadvantage rather than otherwise, owing to the fact that they will add too much. This plan does away with the necessity of a considerable amount of heating that is otherwise required, and also obviates all danger of souring, as you have the milk fresh and warm three times daily, so that if the water added is of the proper temperature, the milk is ready for use.

I desire to suggest, with reference to the proper quantity of this to be given, that the danger is that the good old ladies will give too much, rather than too little, and especially is this true with reference to babies of very tender age. But occasionally with older children milk is not relished, and will hardly be taken in any quantity

or under any circumstances whatever. This was the case with the little boy referred to above, and as in his case, we frequently derive the best effects from beef tea. This is not always relished, but in many cases it is, and in some cases, if allowed, will be taken in fabulous quantities.

As therapeutical agents, in this form of the disease, I shall only designate a few of the most prominent. The administration of large quantities of drugs here, in my estimation, is not the line of procedure that meets the indications to the best advantage. As absorbents, and remedies to meet present and pressing demands of the case, subnitrate of bismuth, and the compound chalk mixture, twice already referred too above, have accomplished all I have expected to accomplish with this line of treatment. Pepsin, in doses of two grains, repeated as often as nourishment is taken, has served to supply, in a measure, the lack of gastric juice, and thereby aided digestion to a considerable extent in many cases where I have prescribed it. In that class of cases with the dysenteric complication, I have given the terebinthines with good effect; pulverized resin, both as an absorbent, and also as a stimulant to the ulcerated condition of the lower bowel, though an uncomely remedy, will accomplish much. But the most important class of therapeutical agents in this form of the disease, is tonics, and I have relied in the main on the feruginous and vegetable. These I use generally in such combinations and proportions as the particular case before me would seem to dictate, not confining myself particularly to any one remedy of either the vegetable or mineral classification of the agents.

This, gentlemen of the Society, is all I have to say on this interesting subject, a subject more suitable for a small volume than for the few pages allotted me here. Respectfully submitted for your most charitable consideration.

Proceedings of Societies.

PROCEEDINGS OF RUSH MEDICAL SOCIETY, NOVEMBER 3D, 1873.

REPORTED BY WM. W. PUGH.

Hemorrhage in Typhoid Fever.—Dr. Sexton. I have noticed an unusual disposition to hemorrhage from the bowels in my cases this fall. Do not pretend to account for it, but know that it exists. One patient, in the fourth or fifth week, when I had every reason to believe that true convalescence had set in, was rather suddenly seized with alarming hemorrhage. The symptoms were, of course, all aggravated, and she is now in articulo-mortis from sheer exhaustion. How are we to know beforehand that such a calamity is about to befall us? I do not mean that we are not to anticipate, upon general principles and observation, that such an event may, and possibly will, take place; but I do mean to ask—what are distinguishing symptoms directing us that the danger is just upon us? In other words, can we tell from the course of the symptoms, the pulse, the skin, the tongue, etc., that the bleeding is imminent, and, if so, what are our means for its prevention?

In some cases, he could tell a day or two beforehand that he was going to have hemorrhage, but not in every case. Did not know why the disposition to this lesion should be greater this than other years. He wished an expression from the membership in regard to this fact, if it be a fact. Wished to know whether their observations had been the same as his own.

Dr. Thomas had noticed the same trouble in his typhoid cases, and, in almost every instance, the hemorrhage was preceded by dark or nearly black discharges from the bowels, the usual typhoid stools changing from their accustomed appearance to that mentioned before. He was inclined to the opinion that it was partly from

congestion of the portal circle, influenced by malaria. He thought that nearly all our cases were more of the "typho-malarial" type than mere typhoid fever. Thought he had been able to ward off these attacks by the free use of the pack, stimulants and tonics. Where he had used quinine largely in the treatment, thought he had less of the hemorrhage. Had used with benefit the veratrum virida as a controller of the circulation. One case had been troubled with epistaxis, alternating with diarrhœa. When the bowels were checked the nose would bleed ; when the bleeding was checked the bowels would be disturbed. Theoretically, he thought the tr. of ergot would be a valuable remedy in the class of cases mentioned. Had not had a large experience in its use, but, from a few trials, thought well of it.

Dr. Sipe. I have observed the same trouble spoken of, many of my typhoid cases having regular *dysenteric* discharges and, in fact, all of them have had the enteric complication. Not many of them regular hemorrhage, but the black stools mentioned by Dr. Thomas. I have no means of knowing when the bloody stools will come. I, however, am always on the alert for them on general principles. I am not acquainted with any diagnostic signs or symptoms whereby we are able to tell when it is about to take place. Epistaxis has prevailed in some of my cases, which is near akin to the bowel hemorrhage, only differing in location. Would think stimulants, anodynes and tonics the remedies where such a disaster was threatened.

Dr. Arnold, Sr. Was glad to hear the remarks which had been made, because it brought out the distinguishing characteristics and features of the diseases of each year. Every year has its peculiarities, giving the type, malignancy and special features of the epidemic or epidemic disease prevailing. It is important that we as physicians should know early what are to be the distinguishing features of disease. "To be forewarned

is to be forearmed," is an old maxim, and it is just as important in medicine as war. Thought the dark-colored discharges mentioned by the gentlemen were oozeings of the blood, and was the sure precursor of the hemorrhage, and should put the practitioner at once upon his guard. The acetate of lead, in his opinion, was *par excellence* the remedy in such conditions. Its sedative property, as well as its well-known astringent effect, should certainly prompt its exhibition. In his observation in former years (for he had not had any typhoid fever of consequence this year) he had not been able to diagnose any length of time beforehand when the hemorrhage was about to take place. If he suspected it, he would at once put his patients upon sugar of lead, anodynes and stimulants.

Dr. Pollett. Wished to know the experience of members in reference to the salutary *curative* effect of hemorrhage from the bowels. Whether, if they got well at all, they did not do so *rapidly* and *permanently*. His experience was to this effect. He did not look upon hemorrhage with that degree of alarm he once did. Am now disposed to regard it as *critical*, and even, in *some cases*, *curative*. It was an effort of nature to get rid of morbid material. Am almost driven to the conclusion that hemorrhage is not a bad symptom, but, must confess, often a very *frightful* one. In reply to a question—what is the pathology of typhoid fever?—he said, "It is emphatically a disease of the bowels, involving the glands of peyer. If brain symptoms set up, it is a *metastatis*; so as to the other viscera and organs of the body. Typhoid fever is also a blood poison, and nature sets up some method by which to rid herself of the *materies morbi*." Hence the disposition to hemorrhage and diarrhœa. As a general rule, when hemorrhage sets up delirium ceases. The thing to do in these cases is to stimulate; give anodynes, astringents and sustaining remedies. If you can save them from shock and exhaustion, they will certainly

recover. I am not enough of an adept to foretell when the hemorrhage is about to begin, but, when I find my patients restless, uneasy and complaining of a sense of exhaustion, although otherwise in a seemingly good condition, I suspect that hemorrhage is about to ensue. In such conditions the immediate exhibition of stimulants is required. Another precaution is, not to allow patients, upon any account, to assume the erect posture. Nearly all cases of bleeding comes on when patients are *sitting* upon the chamber, rarely ever when the bed-pan is used. In fact, it is a good plan throughout the progress of a case of typhoid fever to have the bed-pan used instead of the ordinary vessel. We can not be too careful in our directions in these seemingly small matters.

Dr. Sexton. I concur in some, but not all, of the remarks of Dr. Pollett. I think I have seen some cases where the bleeding seemed to be *critical*, but very many where it was not. But critical or not, I cannot conceive of a more dangerous or alarming symptom than that of hemorrhage from the bowels. We cannot tell whether it may be *critical*, or whether it may not be the *death* of our patient. I have never yet seen the time when I did not quake when I saw blood in the stools of my patient. If it is one of nature's methods of relief, why not open a vein in the arm and let the peccant humors flow forth from that? In this enlightened day such practice would be universally and justly condemned. No man would think for a moment of adopting such a line of treatment. The older physicians can remember when the lancet and mercury were freely used in the treatment of typhoid fever, but the results were most disastrous. I may here take occasion to remark that I have never yet seen a kind ptyalism in typhoid fever. It is always of an unkindly and pernicious character; hence one great objection to the use of mercury. On the subject in hand, I will say that the common turpentine emulsion is not a good remedy where the bleeding has already set in. It

is invaluable during the progress of the case, where there is a phlogosed condition of the stomach and bowels, as indicated by the dry, red tongue, sordes on the teeth and lips, etc., and, I might add, that it is a good remedy as an anti-hemorrhagic, serving to keep off the bleeding.

Dr. Arnold. Concurred in part, but not all, of Dr. Pollett's views. Typhoid is a general fever, a blood poison, manifesting itself in its favorite location, the bowels. The nervous system is the first to receive the shock; hence the manifestations of headache, malaise, restlessness, sleeplessness, etc. Hemorrhage is one of the gravest symptoms we have to combat. We may have it arise from two sources, or rather, in two ways: First, where the ulceration has gone to a sufficient depth to sever important blood vessels; second, from congestion and exosmosis. The first is the most dangerous and more apt to be followed by fatal consequences. The second is more amenable to treatment, and is of that class of cases where stimulants and astringents are well applied. Rest, the horizontal position, anodynes, astringents, and so on, are the most efficacious and sure means. I cannot give the particular symptoms or conditions indicating an approach of the trouble, but, in consequence of its frequent occurrence, would advise to be always on the alert for it. It comes on like a thief in the night, and, as we arm and protect ourselves against such intruders, we should be always ready for these emergencies. Cannot think that bleeding acts in the way of carrying off morbid matters. If so, as Dr. Sexton has intimated, venesection would be the most feasible procedure. This we have under control, and can take much or little. Not so in the other case. It is a sleeping lion. We may succeed in controlling it, or it may arouse and bring death and destruction in its pathway. Had tried blood-letting in his early practice, and found out that its effects were anything but favorable. Had long since abandoned it, he hoped, for the good of his

reputation and, more especially, for the welfare of his patients.

Dr. Thomas. Knew that Dr. Pollett had been extremely fortunate in his hemorrhagic typhoid cases; but that the statistics would not warrant him in coming to the conclusion at which he had arrived. On a former occasion he had the honor of presenting a paper to this society on this subject. Had carefully looked up the authorities, and they all, without exception, were of the opinion that hemorrhage from the bowels was an extremely dangerous symptom. This is to be accounted for in the fact that different circumstances surrounded the cases. Location, air, water, ventilation, all had modifying influences, and were entitled to weight in making up our opinions. In the idea advanced by Dr. Arnold, in reference to congestion of the parts, he could readily perceive how hemorrhage *might* do good, and, in fact, relieve the parts to such an extent that from this point convalescence might begin. But we cannot rely upon this happy termination of our troubles. Dr. Pollett stated, where he had bowel difficulty he had not much brain trouble, and vice versa. My observations are entirely different and, I might say, just the opposite. Ventilation, regular baths, good diet, and various hygienic appliances at our hand, will do much toward forestalling these attacks. Tincture of aconite would, in my judgment, be a valuable remedy in protecting our patients against such dire results. I will again say, at the risk of exciting the opposition of more members, that, when I have used quinine largely, I have not had much trouble with hemorrhage.

Dr. Pollet. Said he only spoke from observations in his own practice and in his own cases. In the practice of others he had seen fatal cases of hemorrhage where, seemingly, true convalescence had set in. What he wished and intended to say was, if the bleeding has not reduced them below the point where stimulants could

reach them, he had always found that, from that point, a rapid and permanent convalescence set in. He was always careful, by all the known means, to guard against it, for, notwithstanding all I have said, it always looks frightful to me.

Dr. Sipe made some observations in reference to the temperature in typhoid cases, not relevant to the discussion of hemorrhage, but valuable and instructive.

Peritonitis, with a written report of a case, will be the subject for discussion at the next meeting, the first Monday in December.

The "Rush Medical Society" meets on the first Monday in each month in the year. Neighboring physicians, within access to the place, are cordially invited to attend and participate in the discussions.

BRAINARD MEDICAL SOCIETY.

The Society met at the Court House, in Winamac, on Thursday, October, 16th, 1873, President I. B. Washburn in the chair.

The minutes of the two preceeding meetings were read and approved.

On motion of Dr. Cleland, the following preamble and resolution was unanimously adopted :

WHEREAS, it is provided in Sec. 3rd, Art. 2nd of the Constitution of this Society, that the attendance of members may be secured by fine; and

WHEREAS, At the 10th meeting, held in Winamac, on June 2nd, 1868, a resolution was adopted, providing that any member, after due notice and without satisfactory reasons, failed to attend any meeting of this society, be fined one dollar; and

WHEREAS, A few members of this Society seldom or never attend any of its meetings, and seem to hold membership, solely for the standing it gives them in the profession. Therefore be it

Resolved, That hereafter, any member failing to attend any meeting of this Society, after having been duly notified by the Secretary, of the time and place of said meeting, unless he shall show a satisfactory reason for his non-attendance, shall be fined one dollar, and on his refusing to pay such fine, or failing to attend two successive meetings, may be expelled by a vote of the Society.

Dr. Cleland reported the case of a boy 13 years old, whose skull was fractured by the kick of a horse. The Doctor saw the case in an hour after the accident, and found a wound over the left eye-brow, with the scalp turned up for an inch and a half, and the bone fractured and driven on the brain. The fracture was of a triangular shape, and the fractured bone was in two pieces. The brain was oozing out at each angle of the fracture, there was entire insensibility, which lasted for 6 or 8 hours. The pulse was intermittent.

Having no suitable instrument at hand, the wound was closed and a compress applied, which was directed to be kept wet with cold water. Dr. Fitch of Logansport, was sent for as council. He, being in the neighborhood on other than professional business, had no instruments with him, and none could be procured until next day.

It was found impossible to raise the depressed bone. Chloroform was given, and the fractured bone removed with a Hay's Saw. The patient lost considerable blood, but stood the operation very well.

His condition improved under the use of compresses and ice water to the head, until the second week, at which time there occurred a considerable amount of cerebral hernia; with chills, fever, and strong symptoms of paralysis of the left side.

Dr. Fitch saw the case again at this time, and it was agreed to administer a mild cathartic and anodynes, and use compressions over the protruding brain, as strongly as it could be borne, gradually increased each day.

This compression had apparently an excellent effect, as all the bad symptoms subsided under its use. There was also suppression of urine, which was relieved by spirits of nitre.

The patient has regained his usual health; the wound is nearly closed, and the small portion remaining open is covered by a silver plate to protect the brain.

Dr. Bell remarked, that it was very remarkable to what extent the brain could be injured and the patient recover. He reported the case of a German whose brain was injured by a pistol ball.

The ball entered on the right side, near the coronal suture of the parietal bone, passed through the brain and lodged directly behind the left eye brow.

The accident was supposed to have occurred in the evening, and the man was not found until the next morning.

The wound was probed very cautiously, for two inches or more, and fearing that the probe might enter some of the convolutions of the brain, and produce a fatal injury he desisted and failed to find the ball.

There was but a small amount of cerebral hernia. Cold water was applied to the head, but no compress was used.

He remained insensible for 2 or 3 days, but reason and sensibility gradually returned, and in a week or ten days he returned to his home in Illinois. He had apparently recovered from the injury; and in eight or nine months afterwards, during a fit of drunkenness, he again shot himself with a pistol, this time in the abdomen, from the effects of which he died. After death the first ball was found in the position above described, covered with cartilage.

Dr. Washburn stated that while attending Lectures at the Rush Medical College, he saw a case, which was under the care of one of the Professors of the College, of a boy who had been injured in a street row. There was

a fracture of the frontal bone, and a large part of the fractured bone had been knocked off and lost. The wound was two inches in circumference.

A compress and cold water was applied to the wound also the chloride of iron rather freely.

There was a very great amount of cerebral hernia, the protracted brain matter was sliced off with a knife, which operation was repeated three times. The boy recovered apparently well.

Dr. W. H. Thompson, reported the case of a man 65 years old, who whilst intoxicated, fell from his wagon on the single-tree and fractured the parietal bone. The bone was depressed for an inch and a half in diameter. Having failed to raise the depressed bone in the usual manner, a small drill was procured from a silver smith, a hole drilled into the bone, and by the aid of the drill, as a lever, it was raised into position.

By eight o'clock next morning, the old man was on the street and drunk, and in this condition went home.

In four or five days the Doctor was sent for, and learned that there had been fever since the second day, there had also been persistent vomiting, attended with much nausea, for three or four days. There was considerable swelling around the wound, which in a few days was punctured with a lancet, which gave exit to a free discharge of matter.

In four or five weeks a piece of bone an inch long and three fourths of an inch wide sloughed out, and in about two months another piece came away. In three or four months, the wound was entirely healed, and has occasioned no trouble since.

Dr. Eaton believed there was no authenticated case on record of complete recovery where any material portion of brain matter had been lost. There were many apparent recoveries, but sooner or later there would be epileptic seizures instantly, or other manifestations of

the injury which would terminate the life of the patient.

The regular subject for discussion, "*Puerperal Fever*," being now in order, Dr. Washburn read the report of a case of *Puerperal Metro Peritonitis*, as an introduction to that subject.

The patient was about 20 years old, previously of good health, and of full habit; was confined August 5th, 1870, with her first child, after an easy labor. The child, a female, was rather under the medium size. The uterus contracted very well, and only a moderate amount of blood was lost.

On the fourth day, she was seized with a chill, followed by pain in the uterus and abdomen. She was lying on her back, with the lower extremities partially fixed. Eyes dull and partially closed; tongue coated with a yellowish thick fur; pulse full, compressible, and 65 per minute; skin pale and moist; abdomen tympanitic and very tender under pressure over the region of the uterus; the bowels were constipated.

Carbonate of ammonia and quinine was given, but fomentation was applied over the abdomen, and copious warm injections were administered to clear the lower bowels, and relieve the distention of the abdomen. After reaction came on, there was fever with increased pain, for the relief of which a diaphoretic with morphia, was administered. The fever having assumed a periodical character, quinine was given to interrupt it. Hot fomentations were continued over the abdomen, and the bowels moved each day with castor oil or injections.

The fever soon subsided, the lochia was restored, and the patient made a speedy recovery, and remained well with the exception of an occasional attack of chills and fever. He believed that but for the use of hot fomentations and ammonia, the lady would have died, and urged

the importance of prompt action, as it will soon be too late to do good.

Dr. Bell remarked that formerly the term puerperal fever included a considerable number of phlegmasia, which are now singled out by obstetrical writers, and arrayed under different heads.

Dr. Churchill, in the *Journal of Obstetrics*, states broadly that puerperal fever is a disease of rare occurrence; and when it does occur, it is in the form of an epidemic, like erysipelas and scarlet fever. The first appearance of the disease was in Edinburgh, shortly after the establishment of the Hospital at that place, from whence it spread all over Europe and was extremely fatal.

In the system of the female there is a radical change, which commences at the very moment of conception, and continues in a greater degree throughout the whole term of gestations. The blood is in a peculiar condition, having its fibrin increased, with a lessened amount of the red corpuscles, and these changes alone may give rise to disease.

The inflammation is closely allied to erysipelas, and requires a peculiar treatment. The vital force is low, and this condition renders the female peculiarly liable to pus poisoning. The blood become infiltrated, and there are deposits of pus in various parts of the body, as in the lungs, liver, kidneys and joints. He once saw a case where the deposits were in every joint in the body as was proven in the *post mortem*.

His experience was limited. He had seen several cures under the treatment he was about to propose, with some failures.

He would recommend a warm flaxseed poultice, sprinkled with spirits turpentine, applied over the abdomen, and repeated often. The inflammation *must* be reduced, as speedily as possible. Opium is the most important remedy—in fact the sheet anchor—stimulents

are not to be neglected. If alcohol be given it must be used with discriminations, and the physician must be guided by the condition of the skin and tongue. If these are moist alcohol may be given with advantage. He places much reliance on carbonate of ammonia. Should there be suppression of the lochia, use injections of warm water in the vagina, and give tincture ergot in doses of 10 to 15 minims, three or four times a day.

Dr. Cleland remarked that the real cause of the disease was not fully known, but that it was evidently some poisonous principle in the blood. He believes the cause may often be traced to the urinary organs, and by a want of proper action of the kidneys the blood is not properly depurated, and becomes poisoned by a retention of the *materies morbi* in the system.

He related the case of a patient who was confined under his care, whose labor was quick and easy, scarcely lasting two hours, and whose condition was remarkably good for three days at which time she was taken with all the bad symptoms of the disease, and soon died. For some time previous to confinement, the urine was high colored, scanty, and voided with difficulty, which condition attended until her death.

In 1847-8 there was an epidemic of erysipelas in the neighborhood in which he practiced, and every lady who was confined in that neighborhood, whose case was complicated in the least with erysipelas died in 24 to 48 hours or a week at the farthest.

In the treatment, the practitioner must be guided entirely by his judgment. Tonics and stimulants are the most to be relied on, but the indications in every case must be promptly met as they arise.

Dr. Eaton gave a history of our epidemics which he noticed in 1861, in which the mortality was very great, but that a free and *early* use of quinine cured the disease, and would even prevent it if administered previous to

confinement. He would use opium, quinine, stimulents and antiseptics, especially the sulphites.

Adjourned to meet in Winamac, on Thursday, Dec. 11, 1873. S. W. C. EATON, Sec.

DRAKE ACADEMY OF MEDICINE.

The semi-annual session of the Drake Academy of Medicine, was called to order at 11 o'clock, on Sept. 5, 1873, at the hall of the Evansville Medical College, by Dr. Rawlings of New Harmony, Indiana.

Dr. J. S. Moore, of Otwell, Indiana; Dr. J. R. Robinson, New Albany, Ind.; Dr. C. P. Bacon, Evansville, Ind.; Dr. P. Y. McCoy, Evansville, Ind.; Dr. E. Linthecane, Evansville, Ind.; Dr. N. Young, Carlisle Ind.; Dr. Wesley Wilson, Yankeetown, Ind.; Dr. Jas. Letcher, Henderson, Kentucky, were admitted to membership.

In the afternoon Dr. J. W. Compton, read a very interesting paper on chemical compounds in the nutrition of the human body, after which the following officers was elected:

President, Dr. S. E. Monfort, of Princeton, Ind.; 1st. Vice-President, J. R. Robinson, of New Harmony, Ind.; 2d Vice-President, Dr. P. Y. McCoy, Evansville, Ind.; 3d Vice-President, Dr. Cyrus Elliott, of Wadesville, Ind.; 4th Vice-President, Dr. E. A. Heason, of Ireland, Ind.; 5th Vice-President, Dr. J. W. Compton, of Evansville, Ind.; 6th Vice-President, Dr. J. S. Moore, of Otwell, Ind.; Secretary, Dr. W. H. Haunee, of Evansville, Ind.; Assistant Secretary, Dr. C. P. Bacon, of Evansville, Ind.; Treasurer, Dr. M. J. Bray, of Evansville, Ind.; Librarian, S. W. Walker, of Evansville, Ind.

A letter was read to the Academy from Dr. J. P. Cook, of Kentucky, regretting his inability to attend. A committee of two was appointed to escort the newly elected President, Dr. Monfort, to his seat.

The Dr. without preliminaries thanked the Academy for the honor and proceeded with the business of the society, such as the reports of the several committees, &c. Dr. J. M. Myler, presented the Academy with a specimen of morbid anatomy, a case of cancer of the face, which was discussed by Drs. Myler and Bray.

The case was a rare one; it commenced 18 months previous to the death of the subject, which occurred but a few days previous to the meeting of the Academy; the tumor commenced near the left tonsil, and by a continual growth forward it protruded through the nasal fasso, by pressure on the superior maxillary, the bone was absorbed, the teeth was as movable as if stuck in soft wax, there had been no ulceration, the tumor was the size of a man's fist, occupying the site of the nose; the specimen was presented to the Evansville Medical College.

Dr. Muchlhausen, Physician to St. Mary's Charity Hospital, invited the members of the Academy to visit the Hospital at 9, A. M., on the morrow; the invitation was accepted and the Academy adjourned to meet at 9, A. M., Nov. 6, 1873.

9, A. M., Nov. 6, 1873.—Academy met pursuant to adjournment. Conveyance was, in waiting to convey the members of the Academy to St. Mary's. Two hours was very profitably spent in passing through the several wards and listening to a few clinical observations by Dr. M. J. Bray, Surgeon to the Hospital. The Hospital was formerly the U. S. Marine, but is now under the supervision of the Sisters of Charity. The thanks of the Academy is due the physicians of Evansville for favors, and Dr. Muhlehausen in particular. All agreed that the hospital under its present management was a success, and a blessing to the unfortunate afflicted. After returning to the Medical College a paper was read on placenta previa by Dr. Walker, of Evansville, a report on obsterics by Dr. Murphy, and a report on surgery by

Prof. M. J. Bray, which owing to other engagements the writer did not hear. WESLEY WILSON, M. D.

Editorial.

HERE is a remarkable cure by alcohol, communicated by W. H. Burnham, M. D., to the *Medical Eclectic Journal*:

Before going farther, I ought to explain that precisely nine years before, while living in Iowa, I had been almost fatally injured by a blow upon the head, upon the left superior portion of the frontal bone, near the coronal suture; which fractured the skull and seriously concussed as well as compressed the brain. For twelve hours afterward, (and for three hours after the elevation of the fragment of depressed bone,) I manifested no sign of returning consciousness; and the attending surgeon pronounced me dead, and declined to dress the fracture, or attempt resuscitation. Mrs. Burnham was the only person present, who believed otherwise. She had been my assistant in important surgical operations, and was herself an excellent practitioner, remarkable for intelligence, coolness and judgment. She confidently declared my case to be suspended animation, the result of compression of the brain; and accordingly, herself, unaided, elevated the fragment of bone, thus saving my life, a favor which she has several times repeated.

This is the prologue: About the first of December, I experienced the sensation of weariness. I ached ineessantly with the sense of fatigue, the unspeakable anguish of being helplessly and hopelessly tired. In about ten days, this suddenly culminated in paralysis. I could only rotate my head and use my right forearm and hand. The function of voluntary motion alone was impaired; the sense of feeling and the power of deglutition remained. Thus chained fast, I wrote daily for hours at a time.

Dyspnœa supervened a few weeks later, threatening me at times with suffocation. A literal hydrophobia also attended. I could myself drink very well, but could not endure to see another make the endeavor. I

became unable to maintain the recumbent position from hydrophic effusion in the chest. For eight long, dreadful months, I dared not attempt to repose upon a bed, or to leave that terrible chair; but like St. Lawrence in *craticula torrere*, I sat and dreamed of torments which my waking hours fulfilled to the completest extent of horror.

From five to twenty times a day those fearful paroxysms of impending suffocation returned upon me, driving me to distraction. I ate the lotos, but not that which Ulysses discoursed upon. It was the lotos, the nepenthe of alcohol. Stifling my convictions and prejudices against it, I used three pints daily, for more than six weeks.

Finally, came the impression over me that the amount taken was too small; and sickening as were the taste and smell, I clamored for more.

At this time my condition was unutterably wretched. I was a general paralytic, and this was the second invasion. It was of severe traumatic origin and occult etiology. I had a local atrophy associated with hypertrophy, and their conditional *rationale* was unknown. I had apparently incurable cardiac dropsy of obscure conditions, and attended with the characteristic phenomena of suffocation, the horror and agony of which only alcohol alleviated. There was also supposed to be enteric ulceration, which could not be relieved. I had unequivocal symptoms of Bright's disease of the kidney, with an albuminaria usually fatal under similar conditions.

"Grown desperate," he takes *four and a half pints of alcohol* in strong punch, which *fuddled* him, but he was "better from that hour;" his "urinary secretion became excessive," and dropsy disappeared.

Was the above a case of—(see his supposed disease enumerated)—or insanity?

X
JAMES JONES, M. D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the University of Louisville, died October 10th, 1873, at New Orleans. He was first elected to this chair in 1836; in 1839 was transferred to that of practice, but in 1866 resumed the control of his first love.

Wm. M. Murrell, of Louisiana.

FROM Russia comes the intelligence that the State authorities, with Pelikau at their head, have come to the conclusion that the recent outbreaks of cholera in that country were not due to recent importations, but to the seeds of the cholera having remained latent from former epidemics, even as far back as 1852.

So—go slow. The truth has at length been reached. The knotty question is definitely settled. “Cholera germs” have been hid in a “Jew’s boot” for lo, many years. The seed dropped in “stony places” has remained intact until some “bird of the air” has removed it to a rich loamy soil, where it “grew and multiplied.” Such notions we cannot disprove, and the above opinion we have no doubt, will be taken by many as “proof direct.”

IN our historical sketch of the medical Institutions of this city, appearing in Editorial in the November number of this JOURNAL, we omitted to place the name of George W. Mears, M. D., as one of the first corps of professors of the Indiana Central Medical College; also, to give the present staff of the City Hospital, which is as follows:

Surgical—J. K. Bigelow, M. D., J. A. Cominger, M. D., Dr.—Patterson, M. D.

Medical—O. H. Oliver, M. D., T. B. Harvey, M. D., F. Newcomer, M. D.

Pathologist.—Thad. M. Stevens, M. D.

J. T. GILMORE, M. D., Professor of Surgery in the Alabama Medical College, performed *vaginal ovanatomy* on a patient of Frank B. Hamilton, M. D.

The case is reported in the November number of the New Orleans *Medical and Surgical Journal*, where, also, is found a recognition of its value by a letter from Prof. T. G. Thomas, M. D., who desires to introduce the details of the case in his “4th edition.”

WE call attention to the article on “Medical Electric-

ity," found in the Miscellaneous Department. We can endorse what the writer says as to the efficiency of the machines made by the Galvano-Faradic Company. For convenience, they surpass any we have seen.

IN our next we shall continue the "History of Medical Organization" in this city. We hope that physicians throughout the State will send us short and complete accounts of any Medical Society, notice of early medical men, and facts relating to the progress of medicines and surgery, etc., from the earliest up to the present times. We wish to use such material in forming a reliable "History of Medicine and Surgery" in this State—something that has been neglected too long. Credit will be given in each report (to be made to the State Medical Society in May next) to any gentlemen that furnishes *data* of this kind. Such facts can be sent to the editor of this JOURNAL any time within the next four months, and will be incorporated in the report.

IN the November number of JOURNAL, page 242, line 9, should read R fl. ext. gelseminum ziss; water, iv; also last line on page 243, should read the same. Page 243, line 22, should read R hydrate of chloral ziv, water zji; also page 315, line 24, Collings for Callings, and page 314, line 13, Meeker for Meekes.

Miscellaneous.

MEDICAL ELECTRICITY.—With your permission I desire to say a few words by way of reply to a communication on the subject of medical electricity of your correspondent, Rusticus, who seems equally anxious to get information himself and to impart it to others. Electricity is a science of vast depth and intricacy, and, more especially, that part of which belongs to animal structures;

in proof of which I will mention that even Carpenter, accustomed to those profound researches we admire in his Physiology, confesses himself unable to follow Du Bois-Raymond to the full extent of those investigations he has made on this subject. Difficult, indeed, would be the practice of medical electricity, and confined to the hands of very few, if one had to go to the very bottom of inquiries like these, and might not venture, for example, to send a current from his battery through a nerve until he had first considered how this artificial influence would effect certain numberless electrical circles moving spontaneously within the infinitesimal molecules of the part itself, each pair of which becomes peripolar or depolar, as the nerve is in a state of action or at rest. I question, indeed, whether even those who amuse themselves with such minute speculations, bring them into actual practice. or are not rather guided by those external symptoms, and that ordinary experience, equally within the reach of my friend Rusticus and the great multitude of other practitioners.

Haud inexpertus liquor. When, some years since, my attention was first directed to electricity as a means of curing disease, the instruments themselves, I confess, presented a difficulty at the very outset; they were new to me, and, as a matter of consequence, not understood. I then had recourse to books, which began with abstract, half metaphysical discussion, extending far into the volume before any practical matter was approached. This mass of introductory matter I do not, by any means, say was useless; I would only assert that it was too much labored and remote for a beginner, and that all the essential points are comparatively simple, and such as may be mastered without any unusual share of difficulty. Since this time, many good works on the subject have been written, as those of Althaus, Reynolds, Tibbits, Hamilton, &c., and many admirable machines constructed, as those of Remak, Fromhold, Meyer, and the

Galvano-Faradic Manufacturing Co. of New York; the latter are those I now use, as being at once simple and efficacious.

While making these remarks, I am not at all to be understood as if desirous of defending those itinerant and other electricians whom Rusticus so justly decries; on the contrary, such ignorant pretenders deserve no countenance, and, as in the instance of the lady with her "primary" and "secondary" who brought on hemiplegia, should be prosecuted and punished by law. All I would advance, is, that the practice of electricity is open to every physician; that the success with which he uses it will depend mainly on his knowledge of disease, and that there is no secret in this, any more than in any other department of medical science. While I would caution the public against the quack, local, or itinerant, male and female, I would also remind the physician of his own ability, and encourage him to make use of electricity himself, if for no other motive than to take it out of the hands of the uneducated. It would, indeed, be a strange thing to see the country overrun with impostors who carry a "box" filled with mischief, like that of Pandora, while a medical man is obliged to look on, or send his patient to a specialist in Boston, New York, or elsewhere.

But I fear, gentlemen, that I have taken up too much of your valuable space, and must conclude somewhat abruptly by advising Rusticus, and others who desire to secure to their patients the benefits of electricity, to procure some such instructive books and some such effective instruments as those above spoken of, when in a short time, with a little study and a little practice, they may thrust out the empiric, vindicate their own claims, and not trouble the specialist.—Correspondent *Medical and Surgical Journal*.

THE ALEUTS OF ALASKA.—Extract from a letter of Dr. S. R. McNutt, published in the November number of the *Pacific Medical and Surgical Journal*.

“We put in a most severe winter—the severest that has been felt here for the last thirty-four years; we had a fine supply of good provisions, plenty of coals and warm clothes. The Company is most anxious the natives should be well taken care of, and I assure you as a certain fact, the natives on our island are better off by many degrees than many large farmers in England or Ireland. They have the very best clothes, boots, etc.; they have plenty of good wholesome food, flour of the best quality, with tea, coffee, and sea lion and seal meat; also any amount of birds, ducks, gulls, snipe, geese, etc., etc.; good houses, warm beds, and clean, good blankets, stoves and coals free of cost; also salmon free.

The Aleut has no house rent to pay, and gets a dollar a day for his work. I often think of a farmer's position and an Aleut's. They never knew what comfort was when the Russians had these islands. Two things they never will forget: one was, how they were starving, with nothing to eat but seals, and frequently the hides of sea lions, no clothing but the skins of birds, made up in a rude way; the other thing they will remember—the whip and club the Russians used to beat them with. But thanks to the American Government, and also to our Company, the Aleuts are now a happy race of people, with a good school, and this winter a new church.

“I am aware that you are anxious for any little scraps of information about female diseases, and particularly about pregnancy and parturition. The women here have very little trouble, comparatively speaking, in getting over a labor. As a rule, they are rather short and thick set, very broad and muscular across the lumbar region. The pelvis is wide, the sacrum not much curved, the spines of the ilium, the acetabula and the tuberosities of the ischium are all wide apart; the cavity of

the pelvis is shallow, which gives more room for the fœtus. A great many of the women are bow-legged. The greater width of pelvis is from side to side; the outer opening is very wide and large; the pubes and mons. veneris well developed, the clitoris highly sensitive to the touch. Where we find a *pure native* or Indian women here, or further north, there is a great scarcity and scantiness of hair on the pubes, and it is very dark, suitable to the hair of the head, which is always long, strong, and thick. But where we find a pure native with a cross of Russian or any other blood, the hair on the pubes is very thick and strong. The girls here begin at or about fourteen years of age to have their little monthly discharges.

The men never expect their wives to be virgins up to the time they marry. They care very little about it, but as a rule they are fond of their wives, though exceedingly jealous, always doubting their loyalty to the marriage vow, and with very good reason. But up at North St. Michael's and thereabouts, an Indian will bring up a little girl in his house and take care of her up to the age when he thinks she is capable of having a child, and then he will marry her.

They suffer very little sickness during their pregnancy. Quickening comes on about the same time as with white women. They suffer from constipation here, which I attribute to the great amount of sea lion meat and seal meat they eat. These two kinds of meat I find to be a great cause of costiveness. The rectum gets overloaded, but there being room enough in the cavity of the pelvis, they do not mind or attend to it.

The sitting, or more properly speaking the squatting position, is the only one in which they are delivered. One old woman places herself behind the one in labor, with her hands around the vagina and perineum; another old woman squats in front of her and watches the progress of the pains. The funis is carefully secured,

about two and a half inches being left. The old women suck the nostrils and eyes of the child after birth. They wash it by taking up a quantity of water into the mouth and then squirting it over its body; then place a bandage on, then the baby is dressed. After all the small things are put on, they take a bandage about five yards long and four inches wide, and begin over the chest and bind in the arms close to the sides; also run this bandage over the abdomen all the way down to the toes. The mother never puts on a bandage. I always insist on bandageing. From neglecting the bandage in former labors, the muscles of the abdomen get elongated, flabby, drop quite down, and the woman is terribly misshapen. As a rule the mother has plenty of milk, large, distended breasts, long nipples, surrounded by a great crop of sweat glands. The mother is almost sure to be up and at some kind of messing work on my next day's visit. They eat quite as well next day as before the labor. Some of the mothers like to carry the child on their back and tilt its head up to the shoulder, then give a jerk to the breast and get the nipple into its mouth, and feed thus. The breasts are so flabby, large and elongated that they reach down to the stomach. Many of the children die young, before they get to be five years old. Scrofula soon breaks out, and bronchopneumonia. I have got the island in very good order. Gonorrhea, or syphilis, we do not get here. I have not seen a case since I came here.

DETERMINATION OF THE SEX IN UTERO.—The following is an extract from an article in the *Western Lancet*, written by C. T. Deane, M. D., professor of Diseases of Women and Children in the University of California:

I was prompted to experiment in this matter some time since, by reading an article in the *Western Lancet* positively asserting that the sex could be so discovered, claiming as a rule as follows: (I do not give the words

of the author, as I have not the article at hand, but simply the gist of it.) "It is well known," the writer says, "that the pulse of the sexes differs, that of the female being more frequent than that of the male, consequently the heart of a female foetus beats more rapidly than the heart of a male." The writer proceeds to lay down the rule that whenever the number of pulsations of the foetal heart exceeds 135 per minute, we may assert that it is a girl, and when below that figure a boy.

The foetal heart-sound is usually found in the medium line about an inch below the umbilicus, but sometimes you find it very much to the right and in some rare instances to the left of the median line. It closely resembles the tick of a watch. The patient should be placed on her back, with no covering but the slightest to obstruct the hearing.

From this table it will be seen that I failed six times out of sixteen to designate correctly the sex. In these six instances the heart-beats were perfectly distinct, and I was most sanguine of a correct decision. We must therefore conclude that to ascertain "that the sex can be determined *in utero*," is a fallacy.

GONORRHEA TREATED BY CREOSOTE.—Dr. Huyette, of Phelps Co., Mo., in the *St. Louis Medical Journal* for September, extols the action of creosote in the treatment of gonorrhea. He gives from one to three drops in emulsion, three times a day and at late bed-time. He claims that it acts as a specific destroyer of the disease, and prefers the internal to the topical use.

CALOMEL IN DIPHTHERIA.—Dr. Duer of Philadelphia (*Obstetrical Journal*) treats diphtheria with calomel $\frac{1}{8}$ grains and bi-carb. soda 5 grains, every two hours, to a child of five years, continued two, three or four days. The membrane begins to be thrown off in two days or less, and all the symptoms abate rapidly.

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PAPER READ BEFORE THE RUSH COUNTY MEDICAL ASSOCIATION.

BY JOHN MOFFITT, M. D.

MR. PRESIDENT—In response to your request, I take pleasure in recording the following facts. Beginning with the middle of August, 1872, disease has been inveterate in character, as much so as has been my experience in a period of twenty-three years' observation. A bad form of dysentery prevailed in our vicinity. It appeared to be, in many instances, almost a malignant form of colitis, resulting at the end of five or six days in collapse; although too often before the fatal issue, a protracted suffering, the patient wasting to extreme emaciation. The pain seemed to be unyielding to the anodyne power of opium and its preparations. At first the cathartic plan of treatment was adopted—that is, a mercurial purgative, or castor oil and laudanum—if there existed any reason for suspecting a want of action of the upper bowels. This done, then anodynes, either of morphia, pulv. opium or dovers powders; keeping off the stomach as much as possible, food and water, until

the more acute phenomenæ were passed. But experience soon proved the anodyne or opiate plan was of but little avail. Astringents were fully tried. The only remedy, after a full trial, found to be useful in our hands was calomel, pushed to its constitutional effects, or rather its local manifestation in the form of ptyalism.

Every case but one, out of fourteen, recovered from the malady, that were so affected by mercury, and in every instance there were no more dysenteric stools.

In the epidemic—for so it might be rightfully considered—mercury was the only article that I resorted to that had the power to jugulate the disease, or in any way control its fearful attacks. What was singular, whenever the attempt was made to produce salivation, it only took from three to four days to bring about the result.

The mode consisted in the administration to an adult of five grains of sub-murias every four hours. After the first twenty-four hours the pain evidently lessened, but no purgative action, as ordinarily anticipated from the use of so much mercury, until the third or fourth day, when there would follow copious stools. Such was the fact, explain it as you will. Never before, in my observation, did mercury so act in flux.

My medical brethren had the same happy effects from its use, judging from my conversation with them on this point. The man that died after having been ptyalized, had no more dysenteric stools, but the same kind as in other instances. In a day or two the salivation disappeared entirely and a rapid collapse ensued, characterized by fatal congestion; the capillaries of every part of the frame participating, as though the prime shock had paralyzed the vaso-motor nervous system.

Autumnal fevers prevailed to a considerable extent, uncomplicated by intractable congestions or other variations; rather an unusual disposition to relapse, making them more than usually troublesome. Only an ordinary

prevalence of cholera infantum, ordinarily manageable, in so far as our experience went. Whenever the affection became complicated with flux, it most generally proved fatal, ending in convulsions and death.

No typhoid fever occurred within our limits, either during the fall or winter months.

By the 20th of October the prevalence of dysentery had largely subsided, and autumnal fevers had more than reached their greatest severity; so that it might be considered the fall sickness had come to a close. During the latter part of November and earlier part of December, the public health had nothing to disturb it, only the presence of cough, affecting perhaps a majority of such as were subject to any form of sickness. Occasionally during December hintings at cerebro-spinal meningitis showed itself in a few cases of catarrhal fever among children.

About the 10th of January our first observations of malignant spotted fever occurred, in a man 31 years of age, dying at the end of forty-eight hours without ever speaking, although for the first eighteen hours he could get up and walk all about the room. Twenty-four hours afterward, called to visit a girl 14 years old. The day previous to the attack she walked a half mile in her usual health. Saw her at 1 o'clock p. m., and she died the following day at 3 o'clock.

These cases were opposites in their symptoms. The first without fever, pulse 40, extremities cold, and breathing laborious; necessary to call into play the auxiliary muscles, hence could not lie still from a sense of impending suffocation; tenderness in the course of the spine, including the six lower dorsal and lumber vertebra. The other, pulse countless at the outset, general muscular soreness, fever, eyes fully injected, delirious, diarrhœa; capillary action feeble, as indicated by pressure on the surface; hurried breathing; in a word, in a moribund condition.

It should be stated in connection with these cases, that there existed a wonderful prevalence of what the people were pleased to denominate "epizooty." This condition had been obtaining the whole time of the presence of the disease so named in the horse, which was beyond all question an epidemic. The general cough amongst men, women and children, inclined the people to ascribe it to the same cause that induced the lung trouble in the horse. Let it be as it may, there could be no mistaking more than a usual manifestation of irritation of the air passages, of the breathing apparatus, in the community. In a few instances it was quite troublesome, persisting even for weeks, rendering many unable to attend to business, but in no case terminating unfavorably. Soon after, however, there began to be some very marked examples of pneumonia, and a few closed in death.

This brings the whole history to the middle of January, when the prevailing cough had arrived at its acme. But now we had the beginning of three distinct affections, namely, cerebro-spinal meningitis, pneumonia, and erysipelas, and which have only closed their career about the present writing. Considerable mortality has characterized their progress and continuance, although it cannot be said the number of deaths have been greater in proportion to the number of seizures and the violence of the attacks. There cannot be much doubt of the fact that most of the pneumonias were clothed in the livery of cerebro-spinal meningitis. Indeed, in a few instances the two affections were unmistakably present in the same individual, and had to be correspondingly treated.

The first cases of so called spotted fever were the most violent. Soon we had every degree, from the mildest to the overwhelming of sensibility, in so short periods that remedial agencies were not allowed sufficient time to effect any thing for the good of the patient. Most ca-

ses, however, furnished ample opportunity for the full application of the medical art, to bring into action its entire energies.

The manner of manifestation were almost as varied as the features of the subjects of its attacks. Sometimes the first announcement of disease, a pain in the ear, without chiliness or other disturbance. Again, the pain might be referred to the index finger, dorsem of the foot, region of hip joint, below the left nipple, male or female ; any part of the body seemingly not exempt. Not unfrequently sore-throat complained of, without any detectable redness or swelling of the tissues. Usually this complaint only lasted one, or at most two days. The most constant seat of pain, the nape of the neck, including most frequently the whole back part of the head and scalp. In the most painful and persistent cases the pain exhibited its greatest intensity either in the right or left temple, usually at the same time extending across to the opposite side in a degree of less severity. But in no case observed, however, was the pain solely limited to the one side. Not more than the fifth case presented the symptoms of opisthotones, but in most instances the muscles of the neck became stiffened and sore, abridging the freedom of rotation of the head upon the cervix. Fever was by no means a constant symptom, yet in the majority there was arterial excitement. The pulse varied from countless frequency to remarkable slowness ; say where it is in health 80, fell to 40 ; where its physiological rate in an adult was 60, reduced to 30 ; the respirations correspondingly lessened in frequency. Such a state of the circulation forbid the patient lying still, because of a sensation approaching suffocation. Most of the more inveterate cases—the tendency from the beginning to coma, convulsions, and, if not soon relieved, death. Diarrhoea and vomiting were frequently initiative phenomenæ of no ordinary character. The alvine dejections from the first characterized

by exceeding offensiveness of smell. These symptoms continued a longer or shorter period, depending much upon the success of treatment; more generally passing off in the course of the first three days of the history.

Such is a brief summary of the prominent features of this epidemic, in the best marked examples of the affection. From these there diverged, or rather shaded off in the direction of mildness, the greatest number of cases, until it became too often exceedingly difficult to determine at once the nature of the invasion; this, too, not unfrequently, the insidious beginning of a most violent and dangerous attack; therefore it became of the greatest importance to make a correct diagnosis in the very inception of the case, or else the chagrin and mortification of a failure in recognizing at the proper time the imminent peril of the sufferer committed to the physician's care. And in more than one instance were such mistakes made. It did not matter what the nature of the disease, during the winter and earlier spring months, the case was more or less modified by the epidemic cause.

Treatment consisted in the use of mercurial cathartics—old fashioned 10 and 10 of calomel and jalap—in those adult cases where the history showed a want for some days of free action of the bowels, or during the progress, when there had not been movements for a number of days. Oftentimes happy effects followed their action, in removing large offensive accumulations. Quinine, iron, and chlorate of potash were the chief reliance internally; opium and its preparations were also not to be ignored—the only means of moderating the intense pain so frequently attending these cases; however, it had to be carefully interposed for the first few days in the management. After the more acute symptoms had passed, then opium became an indispensable means to control the suffering.

Last, though not least, counterirritation to the spine,

extending from the nape of the neck as far down the back as the discretion of the practitioner may determine. If it shall only be applied but once, it will be hardly necessary to do it at all. The soreness must be kept up continuously, in most well defined cases, for three and four weeks. Singular as it may appear, blistered surfaces will often dry in a few hours, although moist sufficiently so shortly before. When such is the case, a renewal must be the remedy, to supplant the morbid action internally, that is connected with coverings of the cord. It is in the latter stages that the anodyne influences are of so much advantage. These are the broad statements in regard to the treatment, without detail.

Erysipelas has been mentioned as epidemic in connection with the epidemic of spotted fever. Many cases of the affection were malignant in character. The first example I heard anything of, proved fatal inside of the first week, by determination to the brain, thus attacking one of the chief centers of life. The next case that I learned of, was in a lady that had no relation to anyone so far as I know, but simply came on spontaneously. Near the time the second example of the affection was concluding favorable, the attending physician contracted the complaint, beginning in the face, as in the instance just treated by him. Only a day or two before the first symptoms of the Doctor's attack, put a colored woman to bed; soon she took puerperal fever and in three days she died of peritonitis—for this was the form the fever—after most violent suffering. Coincident with this, if not a little before, a blacksmith in the town had met with a slight wound in an old cicatrix, which soon resulted in a serious ulceration, amounting almost to gangrenous erysipelas. In due time, this case terminated unfavorably, being intemperate. Before death, however, very considerable sloughing attended the history of the sore leg. From this a second case took its origin, it was supposed. A sister had a crack

or abrasion of some kind, on one of her fingers, and was careless about protecting it from contact with the discharge from her brother's ulcer. In time, pain, swelling, discoloration, etc., were present in the part, giving rise to very grave constitutional symptoms. The consequences followed, and the life was seemingly kept in a balance for days to come. However, the reporter, with some help from the attending surgeon, returned the woman to her family with the *loss of one finger, after a long and tedious illness.*

At the same time the father took the disease, beginning in the left eye, extending over the face and down the neck of the same side. The case terminated without anything unusual. The right eye had been blind for a long time before the attack. When the erysipelas had closed the good eye, by virtue of the swelled skin, it was discovered the unsound eye had the power of vision restored, and remains so still. (Query—May it be sight had been restored before this seizure, and not noticed until this circumstance in disease?) No further trouble in the case—convalescence running regularly until restoration to accustomed health.

Coincidentally with this last case, another in a young man occurred, coming on near the arm-pit, passing through the usual course. Soon, however, a sister became the subject of an attack, and after a rather protracted illness, died. Did not ascertain what if any organ suffered from the concentration of the disease.

Near the middle of January, the reporter had a case in a woman near sixty years old, who obtained her food and raiment over the *wash-tub*. At one of her places of service, she accidentally got her thumb of the left hand somewhat mashed in moving a book case. The following day she went to another customer's to wash, not thinking much about her injured thumb, but before night-fall, she was compelled to desist from prosecuting her washing. One of the young ladies of the house came

home with her. For the next seven weeks, this poor woman passed through a severe ordeal, nearly losing her existence.

Considerable sloughing of the thumb ensued, and the formation of an abscess between the little and ring fingers, or more properly speaking, between the heads of the corresponding metacarpal bone. Also another collection of pus in the thick part of the fore arm, three inches below the elbow.

The final result is, the woman has the use of the hand largely abridged and will for all her future.

Here permit us to digress, and make a remark or two on passive motion. Knowing the importance of practice in this case, the whole matter was duly laid before the sufferer, but the dread of pain restrain the performance to the extent necessary to success. We proposed to perform the work for the patient, but could not get consent. The hand therefore, will not be as useful as it would have been under an opposite treatment.

Now should the surgeon by force compel the patients, under the influence of chloroform, to make passive movements the first time for the prevention of adhesions from the effusion of coagulable lymph, the result of the precedent inflammation.

If it shall not be allowable, there will be abridgement of the function of a part undergoing such pathological change in most instances. Patients can not summon the courage adequate to the induction of pain attending—at first—such an operation. If there shall be no considerable adhesions, but merely the keeping the fingers and hand in the one fixed position for four or five weeks—at the first extension of the wrist and fingers—much pain will follow, so much so, the patient will make much ado about it. The point of inquiry is, shall the surgeon perform the operation opposing the will of the sufferer? Such is the question. How shall it be answered? We wait for a reply.

The first case of erysipelas occurring in our immediate business, took place as follows: On the first of February, an old lady, seventy-four years of age, was attacked with a severe pain immediately below the left breast, it was so severe that it became quite evident relief must be afforded soon or the woman would succumb. The pain was somewhat intermittent, though in a degree present all the while. Associated with it, deep sickness of the stomach, and frequent vomiting, without much ejections from the stomach, after the first few efforts, when the then contents of the stomach had been ejected. Pulse slow and irregular—above natural frequency. Skin rather cool, and sensations of chilliness, for the few days at the beginning of the complaint; bowels torpid; tongue furred white, without being thickly coated; indisposition to sleep; constant moaning, and depressing suffering. In the inception of the treatment, counter irritation to the seat of pain. This acted well in effecting soreness, but not producing the wanted relief. In the mean time, the bowels had been thoroughly evacuated. Now a hypodermic injection of morphia was thrown beneath the integument, over the seat of the intense pain. Immediate relief followed. This was done the fourth day, and by the twenty-second, the convalescence had gone on to the extent of a full appetite, good sleep, and freedom from all sensations of disease. In one word, on the road to a full return to health. The following day, a chill took place, succeeded by fever and the appearance of erysipelatous inflammation on the point of the nose. An event like this, took all by surprise, interested in the treatment, or anxious in the recovery of the old lady. However, the affliction confined its local manifestations to the face, soon closing the eyes, by the tumefaction of the skin. The constitutional symptoms were prominently marked, though not incompatible with the powers of endurance in the system, and at the end of a week, it was manifest the disorder had

spent its force, much to the gratification of all concerned, in the termination.

March 10th, my attention was called to a young woman, sixteen years old, of good general health. She had not been exposed to any one having disease. The first complaint consisted in moderate soreness of the throat, not characterized by swelling of the common mucus membrane on the tonsils, with but little change in the color of the parts, Pain in the head and neck, causing some stiffness of the muscles of the cervix. Rigors complained of on the least exposure to the air of the room or moving the coverings on the bed. Undue heat of skin, with a pulse about one hundred. Bowels had been moved by medicine. As there existed the prevalence of cerebro-spinal meningitis, our mind was apprehensive of the beginning of an attack of the malady. The initiatory steps were in accordance with that view. A long blister was directed to the spine, which drew well, with much abatement of the pain in the head and back. But the general excitement did not subside, with the additional exhibition of chlorate of potash and muriated tr. of iron, conjoined with quinine and sulph-morphia, to change the internal actions of the body. On the fourth day tumefaction of the general surface of the face, indicated erysipelas just behind, for as yet no discoloration of the skin. The conclusion of that visit was, that by the following day, the disorder would be fully developed. Such was the finale. By the next visit, inflammation progressed to full expression of its necessary pathognomonic characters. The case lasted eighteen days before the erysipelatous inflammation came to its close. It began on the bridge of the nose, extending to the whole of the face, and a goodly portion of the scalp; thence down the left side of the neck over the breast and face of the abdomen, and upper portion of the thighs, including the nates, finally expiring on the left knee.

After the appearance of the exanthem, every third

day, some kind of shock, characterized by the progress of the disease. Did not have the opportunity of being immediately present at the first onset, but on two occasions, soon after the occurrence, found the symptoms referable to the circulatory system greatly exacerbated, with the indications of increased debility. Such an event happened three times in the history, beginning the fourth day succeeding the appearance of the eruption. Its last show coincided with the extension of the local disease on the abdomen in the hypogastric region. The nature of the aggravation it was difficult for me to decide. Whether it be a rigor or disposition to one, or a tendency to syncope, or like the slighter shocks incident to embolism, we could not determine.

One thing we can safely affirm, that it afforded sufficient reasons for serious apprehensions and alarm, in the mind of the practitioner. The patient suddenly complained of a chilly sensation as the difficulty came, immediately attended with an impending sense of suffocation, lasting a very few minutes, to be followed by much increase in the frequency of the heart's action, as before mentioned. Now, all this, without any lessening of the local manifestation, or to be followed by any corresponding increase in the visible appearances of the erysipelatous action on the skin. Thus leaving us without any sensible sign to furnish a clew to the solution of the phenomenon. Is it possible there existed small emboli—once in a while cutting loose from their attachments in the heart—thus making such annoying and forboding shocks in the progress of the case? Ultimately, however, we had the pleasure of seeing the complete recovery of our patient at the close of four weeks.

In the mean time a son fourteen years of age, had a catenation of symptoms like many occurring during this period, which we were disposed to refer to the epidemic influence of cerebro-spinal meningitis. Suddenly attacked with headache, extending along the course of the

spine, with complaint of soreness of the throat. Mercurial purgative administered, producing the discharge of copious offensive stools. The quinine, chlorate of potash and muriated tinc. of iron, were given as directed, and in the course of the next four days all these symptoms passed away with the constitutional action. However, in the course of the following week, they returned with their former violence, but soon gave way to a renewal of the former treatment, with the addition of full blistering of the spine, which had been inefficient in the first place. A little girl two years old exhibited similar symptoms to the son—not so intense and threatening. Applied similar treatment, and favorably passed.

March 23d, invited to visit a lady near forty-seven years of age. Good general health. Married thirty-one years—never having been pregnant, nor seldom sick in the history of her whole life.

This woman began by complaining of headache and stiffness of the neck, rigors followed by fever, bowels had been rather slow for a few days, the circumstance which first attracted her attention, causing suspicion to arise in the mind of all not being well. There having been in the family a young man sick with what had been diagnosed a case of mild cerebral trouble connected with the epidemic influence, suspicions were entertained by this lady that something of the same nature had overtaken her. Upon making a careful examination, we did not know, neither could we tell of anything different, from the patient's apprehensions. Accordingly the management was conducted. At the close of five days our patient appeared to be convalescent. Leaving off one alternate visit, we found the symptoms changed, by a renewal of all the constitutional phenomenæ, with the addition of the outward expression of erysipelas of the face, starting on the tip of the nose. So that all that could be anticipated for the future with this woman, was to pass through, at least, a regular attack of erysipelas.

The treatment of this case began the 28th of March, and continued every day up to the 3d of April, when she was not visited until the 5th, then dismissed.

We found during this visit, an old lady exceedingly sick, who had been present with my first patient—to give the necessary attention. She was attacked shortly after the turn of the night previously, with a sharp rigor, soon to be succeeded by rapid pulse, and considerable heat of skin. The pain resembled a pleuritic attack; yet there was more than an ordinary prostration of the vital powers, and fears were expressed of the serious character of the seizure. The pain being so severe, a blister was applied immediately, and the internal treatment began as though we had outward proofs of erysipelas. That is, we put the patient on muriated tinct. of iron, quinine, and as much anodynes as the old lady could tolerate, which was not very liberal doses.

On the following morning the symptoms were not in the least, even palliated. Now the true nature of the complaint could be diagnosed, for the skin affection could be seen in its full development. This patient sank the third day, the erysipelatous inflammation showing itself over the region of the heart, and metastatizing to that organ—paralyzing it at once.

March the 25th, saw another woman, suddenly seized with pain in the tip end of the index finger and thumb. Simultaneously with the pain a rigor, the most energetic I ever witnessed, giving rise to great arterial excitement, delirium, and most extreme complaint that I had observed in all my professional experience. No change in appearance of the thumb and finger were to be seen, yet the pain so intense as to keep the patient in constant exclamation in her wildness—made it fearful to look upon. This state of things was brought about in the course of two hours after the first considerable complaint was made known in the family. By the following morning (for the attack began about noon of the previous day)

the skin of the end of the thumb of the outer side (right hand) was discolored so as to appear black. At this time the pain became restricted to the thumb, the index finger being released. Now the whole hand participated in the localized disease.

A mercurial cathartic was prescribed, which soon acted freely and no doubt to the advantage of the patient, judging from the quantity of matter moved off. So soon as the purgative had completed its action, the following prescription was made, and freely given :

R. Quinine sulph. grs. xxx, pulverized opii. grs. x. m., made into 10 powders, one to be given every three hours until the patient became somewhat relieved of the pains, then to be taken once in four or six hours, as the demand might be, to support and quiet the suffering hand. Also, on the second day saturated solution of chlorate of potash, in warm water, combined with two drachms of muriated tinc. of iron to four ounces of the solution. A teaspoonful was the dose between the powders when given at four or six hours interval.

Applied a blister to the spine in the beginning of the case. Locally, the fermenting poultice was sedulously used to the thumb and hand, until the line of demarkation was fully apparent, and the disposition to gangrene completely arrested, the constitutional symptoms having subsided. During the progress of the disease, an abscess formed between the heads of the metacarpal bones of the little and ring fingers, from which a considerable discharge of laudable pus was the consummation wished for. The consequence, the entire tissues of the hand participated in the morbid action, necessitating the resort to passive motion in order to the restoration of the former use of the hand. But as in the case already presented for your consideration, the same objections were interposed to a satisfactory trial. The abridgement of the function of the hand and wrist will not be so great as in the first instance. Is it not remarkable—the dread

of pain—even among those endowed with the best developed powers of reasoning—when the infliction of pain on the one side, and the permanent loss of a perfect control of an important member of the body on the other, is the question at issue? In most persons called upon to make the decision, the feelings will gain the ascendancy over the judgment in this as in the thousands of other matters which serve to make up the sum of life. Thus it is much more deformity follows in the wake of disease and accident, than would be by an opposite resolution. Nearly all pain that is endured by mankind, is because there exists no means of avoiding it—suffering is regarded as humanity's greatest enemy. And yet, the ignorant world has always supposed that the soul's final good depended largely on the infliction of pain, by mutilation, or other methods of privation and suffering. Seeing, then, the instinctive dread of bodily suffering, how strong must that fanaticism be, that causes any to take courage to endure the exactions of a zeal commendable in a better and more worthy cause.

This patient will recover with more or less impairment in the future use of the hand, rather than submit for one short moment to what would be sharp suffering. The adhesions of the tendons in the thecæ, is considerable, making it necessary to use force to break up the attachment formed by the presence of the inflammatory process so recent in their tissues.

Perhaps, gentlemen, I have trespassed long enough upon your time, in attempting to give you, as a Society, a brief outline of what I conceive has passed within the scope of my observation for the few months past. Also to give you the benefit of what was done to meet, as a physician, the exigencies of those who confided their cases to me. The manner I have presented the facts has been without regard to studied arrangement, simply in the order of nature, as she saw fit to bring them to the eye of the observer, and as seen by him. Our failures, as

well as successes, are passed in review, so as to give an opportunity to those more adroit in managing the system under the influence of causes diverging from the physiological state, to pass just criticisms, either in indorsing the measures adopted, or pointing out wherein a better method might have been pursued.

Proceedings of Societies.

PROCEEDINGS OF THE GRANT COUNTY MEDICAL SOCIETY, AT ITS TWENTY-FIFTH ANNIVERSITY.

Pursuant to previous adjournment the society met in its hall in Marion, on the 17th day of June, 1873, called to order by the President, Dr. L. Corey. Upon call, the following members answered to their names: Wm. Lomax, Jas. S. Shively, Constantine Lomax, L. C. Beckford, Lewis Williams, H. D. Reesener, Alpheus Henley, Albert C. Irwin, Henry Charles, Lavenner Corey, L. M. Jackson, J. M. Baker, J. C. Neal, A. M. Thomas, E. K. Frierwood, Henry Ader, S. C. Waddinton, Cal. Conner, A. J. Baker, L. Baker, A. Hamilton, D. Palmer, J. Sprowl, Jonas Goode, C. C. Riggs, J. C. Dillon, T. C. Kimball, T. J. LaFollet, W. G. Armstrong, J. W. Perry, S. S. Horne, Jr., L. P. Hess, L. O'Neal, and Geo. Egbert.

There were also some thirty-four visiting members of the profession present by invitation, from neighboring counties, among whom were distinguished physicians of the State, viz: Drs. V. Kersey, Dougan Clark, and J. R. Weist, of Richmond; J. H. Helm, and C. B. Higgins, of Peru; Jas. Ford, J. L. Dickens, J. F. Donelson, and others of Wabash; J. E. Lyons, Huntington; W. Scott, J. C. Johnson, W. K. Mavity, Kokomo; R. H. Morgan, Spartansburg; P. Drayer, J. Ranson, R. Mason, Hartford City; J. H. Reynor, Lagro.

There being a quorum present, the minutes of the preceding meeting were read and approved for record.

The next thing in order being the consideration of credentials of applicants for membership, those of J. C. Dillon, M. D., Leonidas Mason, M. D., C. R. Mason, M. D., and Dr. T. J. LaFollet, were presented and approved, and the applicants elected members of the Society.

On motion of Dr. Charles, the visiting physicians were elected honorary members of the Society.

Business requiring early consideration being in order, Dr. Charles stated that a number of patients had been brought in by members to be presented for examination and opinion of the meeting, and to expediate business, moved that physicians having charge of such cases, select those whose opinions they desired, and that they make the examination in an adjoining room, so as to avoid disturbing the regular order of business as far as possible, which motion was carried.

Report of committees being next in order.

Dr. W. Lomax, from the Committee appointed to secure a hall for the use of the Society, reported that the Committee had contracted for the lease of the hall in which the meeting is now assembled, for a term of five years at fifty dollars per annum.

On motion, the report was received, and confirmed by the Society.

Dr. Bates, from the Committee to procure the printing of the Constitution, By-Laws, and Code of Ethics, and, also, the revised Fee Bill of the Society, reported that the Committee had performed that duty, having procured one hundred copies of each as directed by the Society, and presented the same for inspection of the members. The cost of printing was forty-five dollars.

On motion the cost was accepted and the Committee discharged.

Dr. W. Lomax, from the committee appointed to procure an orator for the day, reported that the Committee

had secured the services of Prof. Dougan Clark, M. D., of the Medical Department Indiana University, who would be present and address the meeting. The report was received and approved by the meeting, and 7½ o'clock this evening was appointed for the address in White's Hall.

The Treasurer, Dr. L. Williams, submitted his annual report of the condition of the Treasury. An itemized schedule showed the expenses of the Society for the closing year to have been \$153.91, leaving a balance in the Treasury of \$1,027.83.

On motion of Dr. Charles the report was received and approved.

Dr. Williams stated that the Treasurer's bond was not sufficient to indemnify the Society in case of defalcation, and moved that it be increased to an amount that will amply secure the Society against defalcation of the Treasurer.

The motion was carried, and the Secretary instructed to have such bond made out, properly executed and filed by the Treasurer.

The rule for written communications being next in order, Dr. Waddington read a paper on the character of diseases prevailing in the latter part of the year 1872, and part of 1873.

The paper was discussed by Drs. Kersey, Lomax, Clarke, Henley, and other, and on motion of Dr. Williams, ordered to be filed in the archives of the Society.

Dr. W. Lomax read from notes of practice a report of a case of congenital deformity, in a little girl age nine years, in which there was cleft pubes with absence of bladder, except a small portion of its posterior wall, the mucous surface of which was continuous with the integuments, and uterus opening externally.

In the discussion following the reading of this report, Dr. Helm referred to a very similar case occurring in his practice in a little boy.

Drs. Williams, Dicken, Neal, and others referred to a similar case in an adult male, exhibited before the classes in college during their pupilage.

Dr. Ford, in connection with the subject of malformations of the urinary organs, related a case of hypospadia occurring in his practice.

Dr. Weist remarked that the resources of plastic surgery had, very recently, furnished a remedy for some cases of this distressing malformation, in the production of a factitious bladder, and referred to Holmes' system of surgery for valuable information on this subject.

Dr. Williams read an interesting paper on the effects of the habitual use of tobacco on the human system, which gave rise to an animated discussion, temporarily interrupted by a motion to adjourn to two o'clock, P. M., which was carried. When the Committee of Arrangements distributed all present among the physicians of Marion for dinner.

AFTERNOON SESSION, 2 P. M.

Meeting assembled, and was called to order by the President, who announced that it would be in order to resume the consideration of the paper presented by Dr. Williams, when

Dr. Kersey opened the discussion in opposition to the wholesale condemnation which had been passed upon the habit of using tobacco by the paper, followed by others for and against. The discussion was conducted courteously, and elicited many interesting facts; but the zeal with which the subject was handled savored slightly of party feeling.

Cases brought before the meeting for examination were reported on by the Special Committee appointed for the purpose, but the lateness of the hour forbid extended discussions.

The discussion of cases and papers having closed, the

next thing in order was resolutions introducing new business.

Dr. Waddington offered the following resolution:

Resolved, That the Secretary of the Society report annually the expenses attending the performance of the duties of his office, and that the Treasurer refund the same to him.

Dr. W. Lomax moved in addition to the resolution of Dr. Waddington, that a Financial Committee of three be appointed by the President, whose duty it shall be to examine all claims presented by the Secretary, and upon the approval of said Committee such claims shall be paid.

Both resolutions passed.

On motion of Dr. Palmer, the Society went into the election of officers for the ensuing year, which resulted as follows:

President, Jas. S. Shively, M. D.; Secretary, Wm. Lomax, M. D.; Treasurer, Constantine Lomax, M. D.; Censors, Laverna Corey, M. D., Jas. C. Neal, M. D., Levy Williams, M. D.

After the election a brief period was given to miscellaneous speaking, in which Drs. Wright, Kersey, and Lyons entertained the meeting with some very pertinent remarks on the advantage of a thorough organization of the profession, in the form of County Societies, to be represented in the State Society, as contemplated in the recent action of the latter body. Drs. Kersey and Weist gave very encouraging assurance that the profession in their part of the State was alive to this subject, and would do its duty.

When this brief and very pleasant session of impromptu speeches was brought to a close, the meeting adjourned to meet again at 7½ o'clock, P. M., to hear the address of Prof. Clarke.

EVENING SESSION, 7½ P. M.

Society met in the spacious town hall of Mr. White's,

and was called to order by the President, Dr. Corey, when Dr. Lomax gave a brief history of the Grant County Medical Society from its organization up to its twenty-fifth anniversary, which the present meeting was intended to commemorate. He spoke of the objects of the organization, and commended the zeal and earnestness of its members during its early and experimental history, when the country was new and the roads were wretched, its members scattered at great distances from its place of meeting, were known to ride from ten to forty miles on horseback, (coming in on Monday evening and remaining until Wednesday morning,) to attend the meeting. And, to the credit of the profession in Marion, he would say that they had never permitted their brethren to pay a hotel bill for themselves or horses, when in attendance upon the Society's meetings, but had always made them the welcome guests of their homes on all such occasions. That during a period of probably twenty-five years four failures to have a quorum present at its meetings were as many as could be set down in the score of its delinquencies. Its members had labored earnestly in the full spirit of its object to protect community against diseases and premature deaths, and, as he believed, not without benefit. He expressed a confident hope that the Society would be one of the permanent institutions of the country, and that its future would be as prosperous and far more useful than its past history. Upon the conclusion of his last remarks he introduced Prof. Clarke, who proceeded at once to deliver an able and learned address upon the progress of medicine, its objects and duties, to a large, attentive, and appreciative audience, who were highly entertained and edified by the discourse. The address was followed by extempore remarks by professional gentlemen present, the exercises being agreeably interluded by appropriate music from the choir and band, after which the audience repaired to the dining hall and partook of a sumptuous repast

prepared by the ladies of Marion for the occasion. A most pleasant convivial spirit pervaded the entertainment, and at a late hour the crowd dispersed with the best of feelings and mutual good wishes, and the meeting informally adjourned to meet again upon call of the President.

J. N. BATES,
Secretary.

L. COREY,
President.

Reviews.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, at its Twenty-fourth Annual Session, held at Carlisle, Penn., June, 1873. Vol. IX. Part II.

This is a pamphlet of 314 pages. After the minutes, comes the address of the President, A.M. Pollock, M.D. in which some very good ideas are advanced. We quote:

“Medicine is not only one of the most primitive subjects of investigation, but is also one of the most necessary. These two facts—its great antiquity and its great necessity—would apparently be *a priori* evidence that it must be one of the best understood and established branches of human knowledge. Alas! this completeness cannot be claimed for it. We are forced to confess, humiliating as it may appear, that, while other sciences have more or less rapidly attained exactness, Medicine has lagged behind in the great race for conquest. While many branches of knowledge have been elevated from the shadows of conjecture and uncertainty, and have become established and reliable, Medical Science is still surrounded with much of the vagueness, ignorance, and superstition that made it obscure to the generations of the past. To every candid and honest devotee of our science the question naturally presents itself, Why this incompleteness? Wherefore this want of precision? It has just been said that the contemplation may appear humiliating; and while we may regret the fact of its incompleteness, yet an honest inquiry into the obstacle which retard its progress will reveal the fact that

its slow growth is greatly owing to the difficult and mysterious nature of the subject, and we are therefore consoled with the knowledge that much of the humiliation is more apparent than real. All sciences owe their development in a greater or less degree to observation, experiment, and analogy. The more a given science depends on observation and experiment, the more rapid its development, and the more exact its principles.

"There are other branches of knowledge where observation and experiment are not so available, and where analogy, inference, conjecture, and speculation must continue the reasoning where the former ends. Such is Medical Science.

"It is gratifying to know that it is not so much in the Profession as in the Science of Medicine, wherein the cause of slow growth and want of exactness are to be found. The mind of man being finite can only master a few things in a middle country, one end of which is a vast immense of worlds, and the other so minute as to escape our unaided vision."

And again :

"It may be truly said that age and wisdom endow no physician with royalty. No learning nor experience, able and long continued as they may be, endows any man with the power to divine disease.

"It has been well said, many years ago by Shultz in his work on General Pathology, that *Pathological Anatomy is not Pathology*, and that it is but a means to an end. Physicians open a body and find hypertrophy of the liver or hardness of the spleen, and conclude that the patient died from one or the other of these affections! But they are blind to the fact that hundreds pursue their daily avocations with enlarged livers and hypertrophied spleens, and that women can walk about with ovaria enlarged to the size of a child, till at last, being found in the dead body, it is presumed that death has ensued in consequence of these enlargements! Shall we never learn from such facts that diseases do not originate from diseased masses and products, but that these same bodies are the effects of disease, and the tokens that it has been present.

"While it must be admitted that there is probably no diseased action which is not accompanied by a consequent structural lesion, yet it must also be remembered that the

want of perceptive powers sufficiently acute to discover them, leaves us really as ignorant of the exact nature of such lesions as though they did not exist. In view of our inability to account for morbid changes by anatomical investigation, might it not be well to direct our interrogations by a different induction? The indications for a practical and efficient method seem to point to the study of the physiology of disease. This term is intended to convey more than pathology, and bears the same relation to deranged function that physiology does to normal action. The term used in its fuller meaning would not only explain the causation and symptomatology of morbid conditions, but it would explain why an organ does exhibit phenomena peculiar in any given disease. For instance, pathological anatomy has failed to demonstrate in tetanus the existence of organic lesion in the nervous centres, and pathology adds but little to our knowledge in this particular."

A Memorial to the State Legislature, with reference to another Asylum for the Insane, follows. In this the following is found, which when applied, is equally applicable to our own State, and insane:

"Experience and observation have also shown that restoration, unless in a few exceptional cases, can be more readily and certainly effected by treatment in hospitals properly organized for the purpose than in private families. A large number of the insane, who are now a burden of the long-continued insanity, would, in all reasonable probability, have been restored and become useful members of the community, if the means had been provided by which they could have had prompt treatment in the early stages of their disease. The only certain mode of preventing the increase of mental disorders in those who now constitute the community—for into the question of the prevention of insanity in general we have not time, nor is this the place to enter—is to make such provision that all can receive careful and skilful treatment as soon as the symptoms of the disease appear."

A report on compulsory vaccination comes next:

"No one can read attentively the debates in the British Medical Societies in regard to vaccinal syphilis without being convinced that the fact of its existence is no long-

er an open question among intelligent members of the profession in that country.

"The measure which is found to be necessary in order to maintain such an act as "Compulsory Vaccination" in force in England, is the one which must precede its enactment in this country, viz., the establishment, near every large centre of population, by and at the expense of the body corporate which imposes the act, whether National, State, or Municipal, of a station for the preservation, perpetuation, and furnishing free of charge to physicians, of pure bovine or heifer lymph, both fluid and crust. Until this is done, all hope of making vaccination universal, and thus absolutely preventing the recurrence of such periods of fearful trial as we have recently been called upon to pass through must be given up."

"With a view to assisting in the decision of the important question as to the relative merits of heifer or cow pox lymph, and that which is thoroughly humanized, the chairman of your committee carefully recorded and analyzed the cases in which he had made use of the former, and embodied the results in a paper read before the Philadelphia County Medical Society, in January, 1872, the conclusions of which are, perhaps, of sufficient importance to warrant their reproduction in this connection. They are as follows:—

1. That virgin vaccine lymph direct from the heifer is not readily absorbed into the human system, and that therefore it is not advisable to attempt its use in the face of an epidemic, or the presence of direct contagion.

2. That it is less readily absorbed in the case of infants than of older children and adults.

3. That, when absorbed, it produces the vaccine disease in both its local and constitutional manifestations in its most normal and perfect type, without unusual severity or complication.

4. That virus produced by the inoculation of a single human being with virgin lymph, for the first time, is absorbed into the human system with excessive readiness, constituting the most active virus that can be procured."

A report of "Excision of three inches of the median nerve after an old gunshot wound of the left elbow," by J. L. Stewart, M. D., of Erie, Penn., comes next.

This was in consequence of a pain in the "arm and hand," resultant of a wound from a minie ball in the region of the elbow joint. "Three inches of median nerve" was removed by an incision between the palmaris longus and flexor capi radialis muscles. Relief was permanent.

Dr. William Goodell, of the University of Pennsylvania, delivered an address on obstetrics, in which he considered at length the "abortive action of quinine—vaccination during pregnancy—which he approves of—the prediction of sex by auscultation, which he thinks is possible—and gives an intelligent view of the fact, in being able to determine the facility of inducing premature labor, dependent upon the smaller size of the female child's head."

Cephalotripsy with Cæsarian section in the United States are shortly noticed.

Lacerations of the perinium, puerperal eclampsia, post-mortem parturition, placenta prævia, post-partum hemorrhage, fibroid tumors of the womb, cancer of the uterus, ovariectomy, artificial dilatation of the anus and rectum, perforation of the walls of the uterus by the sound, prolapsus, entrance of a sound into the fallopian tubes, are successively discussed, and out of this material a very interesting report is made. A bibliographic reference is given to each subject.

Whooping-cough as a cause of spinal caries, is contributed by Benjamine Lee, A. M., M. D., of Philadelphia, in which this pathological condition, resultant of cough, is considered to be caused by "shock" to the spinal column during the paroxysm.

A report by Laurence Turnbull, M. D., of Philadelphia, of two hundred and ninety-one cases of disease of the ear embracing "disease of the external ear," "auditory canal," "membrana tympani," "middle ear, and eustachian tubes," is of interest.

Dr. Atlee reports a case of double uterus, from which we extract the following :

"She enjoyed marital embrace. This, however, was painful at the time of marriage. She was very positive that the act of coitus was always confined to the right vagina, and equally sure, that, when Dr. Atlee treated her several years before, the toucher and speculum invariably entered the same passage."

"As both she and her husband were exceedingly anxious to have children, and as nine years had passed without any satisfactory result, Dr. Atlee advised her to make a change of base, and have sexual communication through the left vagina. He felt assured that the result would prove more satisfactory, as the left uterus, which was in a state of virginity, was more fully developed, and the condition of its os and cervical canal was much more favorable for impregnation. On receiving this advice the patient rather demurred, because she knew that she would have to endure pain, but mainly because she did not wish her husband, who had always been ignorant of her condition, to be made aware of it. After giving her proper instructions she promised to carry them out."

Dr. Silbert, of Cumberland, reported a second case of the same abnormality.

Dr. Wm. A. Pancoast, of Philadelphia, gave a case of two women joined together with only one womb—twins, joined together at the nates.

Following this are reports from various Medical Societies, out of which much valuable information can be obtained in relation to the diseases of the various localities, their causes etc., presented as reports of cases, with comments, as well as separate papers thereon. Some of the material here found we shall present to our readers at a future period.

The constitution of the State Society, with the Code of Ethics, (when is it ever absent?) closes the volume.

This volume of Transactions, massive in appearance, shows the advanced position occupied by the members of the Pennsylvania State Medical Society upon medical and collateral sciences.

STATISTICS OF THE STATE OF MICHIGAN, collected for the Ninth Census of the United States, June 1, 1870, compiled in the State Department of Michigan under the direction of the Secretary of State.

The State of Michigan is young, but in nearly every department she is a worthy example to other States more than double her age. Of course this energy is dependent upon various circumstances, but it will largely be found in the class of her early settlers. "The blood is the life thereof." While Illinois, and Indiana have been retarded, and indeed nearly stifled by the "no account" stock that early came, and persistently occupies their southern halves, and Ohio has suffered, though in a less degree, from the same cause, Michigan, Iowa, and the extreme north-west has reached a point to which the second or third generation in the first named States may perhaps be only aspirants. We know that State pride should suppress such sentiments, but it is well for the sick to know their condition sometimes; if nothing else, it inspires us. Let us be urged by wounded pride.

This prelude to a notice of the document that heads this article is not, we think, out of place here, as the record of work done, which if it had been done in our own State, we should have pointed to with pride, as it is we admire the energy that has given fair statistics upon matter of the first importance to every citizen, and more particularly to the medical profession.

The compilation and arrangement of the matter is by H. B. Baker, M. D., by authority of Daniel Striker, Secretary of State.

ARTIFICIAL INDUCTION OF LABOR IN URÆMIA, by Samuel C. Bussey, M. D., Physician to the Louise Home, etc., Washington D. C.

After answering the questions, "are the immediately precursory histological changes, which take place in the minute tissues of the kidneys, in idopathic morbus Brightii, identical with those which take place in the renal degeneration, which not unfrequently supervenes

upon pregnancy? Supposing the tissue changes to be identical, are they invariably preceded by renal congestion?" in the affirmative, the doctor relates several cases as to the effect upon the mortality upon the lying-in albuminuria. Has "albuminuria predisposition to death of the foetus, to convulsions, and to premature labor?"

"It is conceded that puerperal convulsions are dangerous to the life of the child, and that this mortality is not due simply to the convulsive act is shown by the comparative safety of the child in all those cases of convulsions, when the mother is free from albuminuria. Braun says, "if the mother dies during pregnancy, under uræmic symptoms, it is almost always a dead child that is brought to light by the abdominal section. If, after numerous uræmic convulsive fits, the child is born alive a large quantity of urea is found in the blood taken from the umbilical cord; but if it be born dead, we can immediately after birth, demonstrate the presence of carbonate of ammonia in the foetal blood. If it happens that the uræmic symptoms have been entirely removed during pregnancy and delivery, or if the foetus has been cautiously and in good time removed from the cavity, then the life of the child may be permanently saved, if it be mature." Thus it appears, from these researches, that the foetal mortality is due to the same cause that produces the eclampsia, and consequently may occur independent of it, as has been frequently observed by Simpson, Braun, Smith, Cahen, Rayer, Bedford, and others."

"So that while depletion of the uterus of an eclamptic patient diminishes vastly the peril of the mother, the danger to the child is but slightly diminished, thus showing that this danger is due to other causes than the convulsive act."

"Prof. Thomas, in 1870, says "the premature and artificial delivery of a child at the eighth-and-a-half month of utero-gestation, by our present methods" is to be "preferred to delivery by the forceps at the tenth menstrual period," and Barnes of London, (1870,) repeats his declaration of 1862, "that it is just as feasible to make an appointment at any distance from home to carry out at one sitting the induction of labor, as it is to cut for the stone. The operation may be brought entirely within the control of the operator."

MEMORIAL OF THE AMERICAN MEDICAL ASSOCIATION
with regard to the rank of the Medical Corps of the United States
Army.

This memorial is the work of the committee appointed by the American Medical Association in May, 1873, for the purpose of requesting Congress to consider the question of "rank" in the Medical Staff of the army, and also that of promotion and appointments in the medical department thereof. Said committee consisted of J. M. Keller, M. D., J. A. Murphy, M. D., N. S. Davis, M. D., H. F. Agnew, M. D., J. M. Toner, M. D., with the latter gentleman as Secretary. To the memorial is appended a draft of law which they think will remedy the difficulty complained of.

Editorial.

MEDICAL HISTORY OF INDIANAPOLIS.

[CONTINUED.]

"BOBBS' MEDICAL LIBRARY" was the result of a gift of \$5,000, bequeathed by the late Prof. J. S. Bobbs, M. D., to the Indiana Medical College, whose trustees with an eye to the greatest permanent good of the profession, relinquished their right to the same, and by mutual agreement with Mrs. J. S. Bobbs, the executrix of the Doctor's estate, it was given to a board of directors who were to establish a library bearing the above title. Said board were composed as follows: G. W. Mears, M. D., T. B. Harvey, M. D., J. A. Cominger, M. D., Wm. B. Fletcher, M. D., Thad. M. Stevens, M. D., Simon Yandes, Esq.

This board held its first meeting for the purpose of organization, March, 1873, when the following officers were elected;

G. W. Mears, M. D., President.

T. B. Harvey, M. D., Vice President.

J. A. Comingor, Secretary.

Thad. M. Stevens, M. D., Librarian and Treasurer.

A certain amount was to be spent in purchasing standard Medical Works; all respectable Medical Journals of the United States, and such foreign Journals, medical and scientific, as desired, were to be taken for the use of said library. This library is placed upon a firm foundation, with such an organization that will render it secure from almost all disintegrating influences, and supply a want that has long been felt. It is provided for the use of physicians and students, both resident and transient, of Marion county, and stockholders. As yet the requirements of becoming stockholders have not been made, but stock at reasonable figures, will be issued and furnished as needed, to any physician of the State.

In this connection we would say that any information in regard to the library, can be obtained by addressing the editor of this JOURNAL.

In Medical Societies Indianapolis has been prolific, and memory dates not back to the period when the State Society was called to meet in this city, but we believe it was in the year 1822. We only know of the fact from rumor, but would be thankful for any information regarding it.

In 1845 or '46, the physicians of Indianapolis organized what was called the "Marion County Medical Society," the first local Medical organization had in this city. We do not know all the membership. Drs. Sanders, Mears, Bobbs, Jameson, Dunlap, Gall, Bullard, Parry, Gaston and Andrew Hunt, were among the first; afterwards Woodburn, Thompson, Funkhouser, and others were added. Various physicians throughout the county of Marion, also belonged. This Society had for its officers: Dr. Sanders, President; Dr. Bobbs and Dr. Hunt, Secretary and Assistant. Dr. Mears was the second President. These gentlemen met once a week, at

first, in the old "Governor's House," that then occupied the "Governor's Circle," at intersection of Market and Meridian streets, a house well remembered by the "old inhabitants," we among them, around whose darkened walls and weather-beaten "parapets," cluster scenes and incidents melodied by age, and hallowed by memory. There, in the little north room, below, opening out upon the wide hall, the spirit of Esculapius often came, now to soothe the spirit wounded by home thrusts of a brother, now to fire with zeal to science and medicine, and urge to the forensic combat. Dear old "times and place"—for during its latter day, in 1852 and '53, while a student of medicine, we often visited their deliberations.

This Society gradually died out, disintegrated by causes hard to analyze, apathy, too much business, *some little* ill feeling among members, etc.

In 1855-6, another organization was had. Dr. Sanders was no longer among them—gone to his fathers. All the other old members with numerous new ones, constituted the second Society. Like the first, it had regular constitution and by-laws, with appropriate officers, meeting at different offices of the members, and reading; with discussion of papers, etc., was the order.

Doctors Kitchen, Newcomer, Parvin, Clay Brown and Darrach, were among the new members. The editor of this JOURNAL also joined the "interview," and was honored with recognition. Two years was about the lifetime of this attempt at organized action. Causes too numerous to mention, and too recondite to understand without endangering our individual sanity, "bust" it up. But within a few months a Medical Phoenix arose from out the *debris* under the garb of "Free Association." No constitution, no by-laws, no order of business, no fees to pay, no officers save as occasion demanded some one to preside. Each one in turn, and no one long, was President, Secretary, Treasurer, etc.

At whosever office they met, the physician was expected to set before his children "meat, cakes and cider," the latter degenerating finally into second rate *corn juice*, then to "*bald face*," then to the "old black bottle," that was passed around with a single glass, in token of fraternal love and fellowship. Something—was it the alcohol?—had an effect. A short discussion of a subject passed, and then laughs and jokes were the order. As time wore on the symptoms were aggravated, as the condition became "chronic," the heated blood flowed swiftly through the veins, the slightest cause called forth the beligerent propensities of the gentlemen members, this mode of "sociology" became the fixed habit, and it was in consequence of the "lapse" of one or two, and consequent failure in their turn to supply the "beverage," that at length gave the occasion birth for the "suspension" of this third attempt at "medical organization."

From 1859 to 1863, chaos reigned, and it was not until that date that any local organization was attempted. Then a few physicians met under the name of Indianapolis Medical Association. The first President being Dr. Athon, the second Dr. Gaston, and the third Dr. Harvey. During the latter's "reign," in 1864, a second organization was formed, composed partly of members of this last named society, and partly of non-members. This assumed the name of the "Marion County Medical Society." Immediately upon its organization, a union was effected between the two Societies, the joint organization taking the name of the "Indianapolis Academy of Medicine." Dr. T. B. Harvey, as we have said, was the first President of this new Society.

Many and various have been the meetings of this new Academy of Medicine. Sometimes flourishing like a "green bay tree," at others like a modest violet hid away under a friendly ledge of rock—often filled to overflowing, and as often was the "Hall deserted." But at

no time was there any "wine and healthy stuff" needed to bring up the enthusiasm, the members considering that if that could not be done by interest in science, it would be better to permit it to wane.

This organization has held together longer than any of the former, having, up to the present year, most stringent rules and by-laws. At the commencement of this year all by-laws and rules were abolished, so that no attendance is required, no fees need be paid, etc. This "free and voluntary" system was inaugurated for the purpose of conciliating certain members who, by a previous acting rule, were cut off from membership for non-attendance. Whether it was the "right thing in the right place," or not, remains to be seen. It is but the re-inauguration of the same system that failed to give perpetuity to the former society, mention of which has been made above. May this attempt work better than that. From the former description, it will be seen that each organization was, for a time, "just the thing." That none, however, lasted long—disintegratory elements destroyed them in succession. The "Academy of Medicine," may it survive the attacks of foes and the management of friends.

WE call attention to the advertisement of Wm R. Warner & Co.'s Sugar-coated Pills, Elixers, etc. We know that the articles obtained from this house are perfectly reliable, and that they are "standard" medicinal compounds, as recognized by the profession generally.

IN the November number of this *Journal*, in editorial referring to the Medical Colleges of this city, we spoke of the connection of the Indiana Medical College with the State University at Bloomington. We now say in addition to what is there recorded, that this connection will, we think, result in much good to the Medical College.

The Board of Trustees of the State University are as

follows: James D. Maxwell, of Monroe county; William K. Edwards, of Vigo county; William Hannaman, of Marion county; B. E. Rhoads, of Vermillion county; J. S. Irwin, of Allen county; W. C. DePauw, of Floyd county; Hiram W. Cloud, of Vanderburgh county; Milton McPhetridge, of Monroe county.

All these gentlemen are well known throughout the State. Wm. Hanneman, a man of noted integrity and singleness of purpose, just resolute enough to stick to a good thing when he commences it, is in sentiment heartily identified with the welfare and prosperity of the University as it *was* and as it now *is* with the Medical department added. W. C. DePauw, of New Albany, a man well known thoroughout the State for his liberal mindedness and munificent aid toward educational institutions who with an ample portion dispenses with liberal hands endowments and donations. We are pleased to know that such men as those and other members of the Board are personally interested in our *pet*, the Medical College. We hope to have the support, in our endeavor to promote medical educational interest, from all true and good men in the State. Of course our medical brethren will continue to assist us as in times past.

We have a faith that at the next session of the legislature, an ample provision will be made by the State for the support of the University, with its law and medical departments, so that it can be placed on an equal footing at least with similar institutions of sister States. The Board of Trustees did nobly in their endeavor to further this end during last session. If a few such men as W. K. Edwards, late speaker of the house, were in the legislature next session, we should have no fear, we not doubt that there will be many such.

PROGRAMME FOR THE SEMI-ANNUAL MEETING OF THE INDIANA STATE EDITORIAL ASSOCIATION.—The next semi-annual meeting of the State Editorial Association will be held at Indianapolis, commencing on Thursday, Jan-

uary 15, 1874, at 11 o'clock, A. M., in the Hall of the House of Representatives, and will continue two days. The following is announced as the programme:

1—Calling the roll, reception of new members, payment of dues, and the appointment of committees.

2—Report of committee on State Advertising Agency, by J. Searce, of the Danville Union.

3—"Newspaper Poetry," paper, by E. C. Tuttle, of the Indianapolis Sentinel.

4—"Newspapers of Western Indiana," paper, by Isaac Herr, of the Brazil Echo.

5—"Newspapers of Southern Indiana," by Josiah Gwinn, of the New Albany Ledger-Standard.

6—"Newspapers of Eastern Indiana," by Jesse M. Hyatt, of the Newcastle Times.

7—"Newspapers of Northern Indiana," by H. E. Wadsworth, of the Laporte Argus.

8—"Newspapers of Central Indiana," by A. J. Halford, of the Indianapolis Journal.

9—"Reporters and Reporting"—paper, by G. B. Thompson, of the Indianapolis Evening News.

10—"Journalism—as it is pictured, as it is, and as it might be"—address, by S. Vater, of the Lafayette Journal.

11—Poem, by Enos B. Reed, of the Indianapolis People.

12—Election of officers for ensuing year.

13—Paper by Mr. Terry, of the Evansville Journal.

14—Reports of committees, and discussion thereon.

15—Unfinished business.

16—Installation of officers.

J. B. Stoll, of the Ligonier Banner, has been invited to read a paper on "Advertising and Advertising Agents."

On Thursday evening a social reunion of the members of the Association and their ladies will be held at Bradshaw's Hall. Good music will be furnished for the occasion.

Every editor and publisher in the State is cordially invited to attend and participate in this meeting; and this invitation includes their wives.

The excursion to Washington and New York has been

postponed, on account of inclemency of the weather, until May.

G. J. LANGSDALE.

President Indiana Editorial Association.

WE especially desire to call the attention of our Senators and Representatives to the memorial of the committee of the American Medical Association, as issued by the Secretary, J. M. Toner, M. D., of Washington City, with reference to the appointment and promotion in the Medical Corps of the Army. Sanctioned and recommended, as it is, by the Surgeon General, J. K. Barnes, in his annual report for 1873. Let them read it, and the justice, nay, the absolute necessity of some such a provision as therein recommended will be apparent. We place it not upon the ground of justice to the medical corps, although that plea is patent and strong, but justice to the soldiers comprising the army. Their health and well-being calls as loudly for the change as indicated, as any circumstances we could mention.

We hope a copy of such report and memorial will be placed in the hands of every member of Congress, and if they fail to perform their duty in this matter, the effect will but rebound upon themselves, with a shock that will awaken them to a sense of such duty. The Surgeon General also calls attention, in his report, to the fact that the issue of 5,000 copies of the Surgical History of the War was insufficient to supply the just demand. This we are well aware is the fact. If the work is of value sufficient to justify an issue at all, then it is certainly valuable enough to have an issue of copies sufficient in number to supply those for whose benefit it was originally put forth. We hope to see this matter attended to during the present session of Congress.

Another subject of importance spoken of by the Surgeon General, is the publication of a descriptive anatomical catalogue of the Army Medical Museum. No argument should be needed to show the very great value

of such a work. The United States are behind nearly every other civilized country in the matter of statistics of every kind, and of works of the kind above mentioned, which we regard in the light of special statistics. From such facts generalized works comes, and truths which are not isolated and alone, but general, of universal application, are derived.

Let Congress, while she deals with more patent faults, not forget the "little foxes" that may, if not attended to, sap the foundation of any superstructure they may raise, or disintegrate and destroy the finest fabrics woven with thread, and glittering with false glory.

Miscellaneous.

A MEDICAL COLLEGE FOR NEGROES.—We are to have another medical college in Philadelphia—the Medical Department of Lincoln University. This institution, located at Oxford, Chester county, Pennsylvania, was established some years ago, and is rapidly growing in importance. It is intended especially to meet the educational wants of the negro, Mongolian and Indian races. The Medical Department is now fully organized, and its early removal to Philadelphia is contemplated, where the students will have the advantage of clinical instruction in one or two of our prominent hospitals.

The Medical faculty consists of the following gentlemen, all of them residing in Philadelphia, and all known as respectable, and some of them prominent members of the profession; S. B. Howell, Professor of Chemistry; E. C. Hine, Professor of Surgery; Theo. H. Seyfert, Professor of Physiology; Harrison Allen, Professor of Anatomy; Henry Hartshorne, Professor of Obstetrics; F. H. Hassler, Professor of Materia Medica. Leonardo

S. Clark has been appointed Demonstrator of Anatomy.
—*Richmond and Louisville Journal*, Sept., 1873.

WEANED FROM HYPODERMICS.—A young lady who had been accustomed for a long time to the use of opium, applied to an eminent physician to make hypodermic injections of morphia. He commenced by making the injections as desired, of morphia and water; by degrees the quantity of morphia was lessened without her knowledge, until within a few days nothing but pure water was injected; after which injection she would lapse into a quiet sleep, in the same manner that she had been accustomed to when under the actual use of morphia. This treatment was continued for several months, during which time tonics had been used, to strengthen the system and bring about a healthy condition after being so long a time under the influence of opium. When he considered it safe to do so, he told her plainly that she had not taken a particle of morphia for several months, and was entirely free from its influence; this statement of course was received with intense surprise, as well as unbounded joy. The lady is to-day entirely free from any desire for opium.

We give below the formula for an "anti-opium pill" which has been used for several years in the English hospital at Pekin, China, and its efficiency proven in numerous instances, but of which we have no actual knowledge: Henbane, $\frac{1}{4}$ grain; Gentian, $\frac{1}{2}$ grain; Quinine, $\frac{1}{4}$ grain; Ginger, $\frac{1}{2}$ grain; Camphor, $\frac{1}{2}$ grain; Cayenne, $\frac{1}{2}$ grain; Cinnamon, $\frac{1}{2}$ grain. Soap and syrup for coating. Three pills a day.—*London Druggist*.

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Original Communications.

TOBACCO—ITS INJURIOUS EFFECTS UPON THE HUMAN SYSTEM.

BY LEWIS WILLIAMS, M. D.

Read before the Grant County Medical Society at its 25th Anniversary June 17, 1873.

Tobacco is one of the most active and deadly vegetable acro-narcotic poisons known. Having no particular antidote, acting directly upon the nervous system, enfeebling, deranging or extinguishing the actions of life, it tends directly to produce disease and premature death, of which ample evidence is given in the many departures from health in the organic functions of the tobacco user.

The distinguished Prof. R. Q. Mussey says, in his essay on the *influence of tobacco upon life and health*, that the habitual use of tobacco in any of its forms, as snuff, cud, or cigars, may produce a sense of weakness, sinking, pain at pit of stomach, dizziness, pain in the head, dimness or temporary loss of sight, paleness and sallowness of the countenance, swelling of the feet, an enfeebled state of the voluntary muscles, tremors of hands, weakness, tremulousness, squeaking or hoarseness of the

voice, disturbed sleep, starting from the early slumbers with a sense of suffocation, or the feeling of alarm, nightmare, apoplectic fits, confusion or weakness of the mental faculties, feverishness, and irritability of temper, instability of purpose, great depression of the spirits, fits of unbroken melancholy and despondency, and in some cases entire and permanent mental derangement.

And in addition to the pathological effect enumerated by the distinguished Mussey as consequent upon the use of the noxious weed, we will quote from Dr. John Lizars, of Edinburgh, the following, viz: "Sickness, vomiting, dyspepsia, vitiated taste of mouth, loose bowels, diseased liver, palsy, amaurosis, deafness, emasculation, and cowardice."

It has been held that the numerous cases of insanity in Germany have assigned as one of the causes, the excessive use of tobacco; and that Spain has probably degenerated more rapidly and to a greater degree than any other nation in consequence of the baleful effects of this noxious weed.

It is said that Spain is now a vast tobacco shop, and its only consolation is, that other nations are fast approaching to its level. The great danger to be feared is the enfeeblement of the mind, the loss of the powers of intelligence and of moral energy; in a word, of the vigor of the intellect, one of the elements of which is memory, and result in a lower level of intellectual development than previous to its introduction among the people.

The loss of memory takes place from its use in a greater degree than from the excessive use of alcohol; evidently from its acting more directly upon the brain and nervous system generally. Also, when greatly indulged in, it produces both locally and constitutionally, the most dire effects.

Locally, smoking causes ulceration of the lips, tongue, gums, mucus membrane of the mouth or cheeks, ton-

sils, velum and pharynx. Sometimes it also produces a carcinomatous ulceration of the lips. It is said to be scarcely possible to heal a syphilitic sore, or to unite a fractured bone in a confirmed smoker. His constitution seems to be in the same vitiated condition as in one affected with scurvy. Amaurosis is a very common result of smoking to excess. It is thought not to occur as a result of chewing or snuffing. Deafness is not so common a sequence of smoking tobacco as amaurosis.

Congestion of the brain occurs mostly with those addicted to smoking, in whom a pipe or a cigar is seldom out of the mouth. Apoplexy is produced by excessive smoking and the immoderate use of snuff.

The form of palsy, produced by excessive use of smoking is hemiplegia. It follows as often too much snuff as too much smoking. Emasculation is also said to be one of the effects of the use of tobacco; for instance, as has been said, a father of two or three children has advanced toward thirty years of age, and greatly to his surprise and mortification he observes that he has lost all inclination for sexual indulgence; and, upon investigation it is ascertained that he is a confirmed smoker. Tobacco smokers are also found to be in spirit cowardly, and deficient in manly fortitude to endure any great suffering, or perform any great feat requiring personal courage.

By its general consumption for any considerable time, our race *must* become changed, both in corporeal and mental faculties. We can not fail to be enfeebled in body and mind, and as an inevitable consequence this weakness will be transmitted to our posterity, increasing as it descends one generation after another until we shall indeed become a diseased and degenerated people.

Surgeon Solly, the able clinical lecturer of St. Thomas Hospital, declares that the cases of general paralysis are more frequent than they used to be, and that he suspects smoking to be one of the causes of the increase. May

not this fact account in a great measure for the increase of this class of diseases in *our* country?

The use of tobacco may destroy all the chances for recovery in otherwise favorable cases by its relaxing effect upon the skin and mucus membranes, allowing or permitting the pouring out of their secretions; at the same time there is a great depression of the nervous system and consequently loss of vital powers; hence may follow as a result an easy and almost certain perforation of the intestinal parietes, as in cases of typhoid fever.

Again, it injures health by the loss, diminution or perversion of the normal constituents of the salivary secretions, which is manifest from the universally acknowledged fact that it prevents obesity, or, when it does exist, diminishes it. The above fact, which almost every body, the common observer as well as the medical man has noted, is an evidence that the ordinary effects of the article are in opposition to, and actually prevent the full and complete digestion and appropriation of food.

Hence the greater the amount used, the greater the emaciation, other conditions being equal, and the more the characteristic symptoms developed thereby, which are too numerous indeed, and too well known to repeat here.

Again, a gentleman in the prime of life, and who ought to be in the vigor of manhood, goes to the office of a physician to consult him with reference to his health; the patient is losing his health, his energy, his appetite, and his flesh. He gave positive evidence of great nervous prostration, his hand is unsteady, his skin of a dusky, smoky appearance. He is restless and wakeful at night—when he has finally fallen asleep, he startles from his slumbers with a sense of suffocation, or sense of alarm. He is discouraged, despondent, greatly alarmed as if in view of an impending danger or of some overwhelming disaster.

Again, it may be he is suffering from nausea, vomiting,

dyspepsia, loose bowels, diseased liver, numbness, loss of sight or hearing, loss of sexual desire, cowardice, confusion or weakness of the mental faculties, irritability of temper, instability of purpose, or it may be there is entire and permanent mental derangement, or any other pathological symptoms having their origin in the nervous system—and yet, in consequence of the almost universal use of this weed, and even by those who are, or ought to be the conservators of the public health, and who, in consequence of its baleful effects on vision have been and are still so blinded as to render them incompetent to treat, or even to give advice properly to the poor unfortunate sufferer.

The life forces are capable in each individual case of enduring only a certain amount of resistance, which will be just equal to said forces. Now if the life forces are in any manner interfered with, so as to lessen them, just in that proportion may the resisting forces be diminished and yet be productive of the same result.

From which proposition may be deduced the following: That any article taken into the system through any of the avenues that shall affect the human system deleteriously, as has been proven tobacco does, will detract from the powers of resistance, and hence, produce a disparity in the life and resisting forces, and as a consequence, an attack of sickness, or a mechanical injury, or a surgical operation that would be endured and recovered from, without even being in much danger, would, under such deleterious influence, terminate in death.

And, again, from the same proposition we arrive at the fact, that many persons who, perhaps, would be naturally in possession of ample intellectual and physical vigor to insure a moderate, or fair degree of success in life would, if poisoned by the injudicious use of this weed have their sensibilities dulled, so as to absolutely prevent success in the race of life in which we are all engaged.

There are many, no doubt, who, unless their minds are

in a normal condition and under the most powerful natural stimuli, such as the keen demands of nature magnifying their mental or physical wants, can accomplish any thing of importance, but who if poisoned by the common effects of tobacco are sure to sink so low physically and intellectually as to make it morally impossible for them to succeed in life.

Now, in conclusion permit me to say that the highest order of intellect, developed and strengthened by education, may endure a vast amount of abuse in this manner, and yet not seem to be injured; who can say to what heights of eminence the person might not have attained in absence of the deleterious effects of this noxious weed?

Proceedings of Societies.

MEETING OF THE STATE BOARD OF HEALTH OF MICHIGAN.

The State Board of Health met at Lansing, January 13, 1874, at 9 o'clock, in the office of the Secretary of State, this being the time appointed for their regular quarterly session. The meeting was called to order by the president of the board, Dr. Hitchcock. There was present the following members: Dr. H. O. Hitchcock, of Kalamazoo; C. H. Brigham, of Ann Arbor; Prof. R. C. Kedzie, of the Agricultural College, and the Secretary, Dr. H. B. Baker, of Lansing. The minutes of the last meeting were read and approved.

Dr. Kedzie presented to the board for adoption a new tester, which it is hoped district inspectors of oils will use. Unlike the tester that Mr. Fowler uses, it is covered by a cover that does not allow the gasses from the heating oil to escape, but confines them so that a well-

lighted match may be brought in contact with the gases through a small hole in the cover above the oil, and this continued with every increase of temperature of two or three degrees till the vapors burn with a blueish flame. The lowest temperature at which the vapor will thus burn is called the flashing point. To ascertain what is called the burning point, the oil is uncovered by the cap of the cup containing the oil being removed. At every rise of one or two degrees a lighted match is plunged into the oil till that point is reached, when, instead of extinguishing the match, the oil takes fire. This is called the plunge test, and the lowest temperature at which the oil takes fire is called the burning point. Dr. Kedzie experimented before the board to show them wherein the "State Board of Health tester" was superior for testing purposes to that used by Ohio inspectors. He operated upon some oil obtained from one of the stores in this city, which was branded as 150 deg. fire test, and which flashed at 110 deg., and which took fire at 133 deg. by the new test.

Dr. Baker, the Secretary of the board, then reported to the board his observations while at the meeting of the "American Public Health Association," recently held in New York city.

"On my way to New York to attend the last meeting of the American Public Health Association, I stopped for one day at Poughkeepsie. While there I visited the Hudson River State Hospital for the Insane. In a published paper sent to each member of the board, I have given some of my impressions concerning this hospital. I also visited the water works at Poughkeepsie. The water is taken from the Hudson River just above the city. It is pumped into the settling basin, being caused to flow over a dam several feet high, thus thoroughly aerating it. After settling it passes through filters into another large receiver, whence it is pumped up to a higher and stored in a capacious reservoir. I did not learn

the exact amount of organic and inorganic matter in the water after filtration; but the water is regarded by the citizens as much better than that previously obtained from wells.

In a conversation with Mr. Collingwood, an intelligent man, an old resident of Poughkeepsie, and present proprietor of the Opera House, he stated several facts of interest in a sanitary way. Not far from where the Opera House now stands was formerly a hotel. The water supply for the hotel was from a well, and the water was used in great quantity, and was considered of ordinary quality. When the hotel was abandoned, and the well unused for a short time, the water became so impure that it emitted a bad odor, and the impurities was apparant to the unaided vision. The well undoubtedly drained the locality immediately surrounding it, and by long occupation the soil had become saturated with filth. Mr. C. said that his experience in his own family had taught him to beware of water supplied from wells in localities where the soil had become to some extent saturated with decomposing organic matter. Formerly he had much sickness in his family from diarrheal diseases, and for a long time the cause seemed unaccountable. He finally concluded that it was the well water. He had a large cistern made with apparatus for filtering and storing rain water, and had no diarrheal diseases of any consequence in his family thereafter.

While in New York city the members of the association were invited to visit some of the slaughtering and rendering establishments, with a view of learning the extent to which the bad smelling gasses arising from the processes employed in these establishments were either destroyed or given out to the surrounding atmosphere. One other member and myself accepted the invitation, and in company with Assistant Sanitary Superintendent D. E. H. Janes, and Sanitary Inspector Dr. Judson, we were driven out to that portion of the city and examined

thoroughly the methods adopted in two of these establishments. In the first one we visited the rendering was accomplished in strong iron vessels tightly inclosed, but a tube for the escape of gasses arising therefrom leading from each cauldron to a little building outside the main one, where the gas was passed up through layers of quick lime for the purpose of purifying it, after which it was conveyed to the furnace and burned. A jet from the same tube in the engine-room could be lighted and employed to furnish light. This jet was lighted in our presence, and burned about as ordinary gas. Theoretically, this system should destroy much at least of the disagreeable gas. Practically, it is not very satisfactory. The purifying apparatus must be opened, and the lime exchanged quite frequently, and the overseer stated that the conditions which we found on our visit were not unfrequent, viz: An escape of the sickening odors through imperfect closing of joints of the various tubes, and especially the "man hole," through which the lime is introduced.

The next establishment which we visited had a much less complicated, but very much more successful apparatus for disposing of bad gasses. It consisted of tubes by which the gasses were conveyed immediately into the furnace where the heat was greatest. What proportion of the deleterious gas was destroyed we could not tell without an examination of the smoke issuing from the top of the chimney; but it seemed probable that it was in great part destroyed, and what was not destroyed was conveyed to such a height above the ground, that there would be great delution with air, and opportunity for oxidation in the way, before coming to be breathed by the people. I laid down in my own mind the general principle that wherever foul gasses of this character can conveniently be conveyed directly into a furnace, this promises a very favorable method of destroying them. This principle is applicable to other gases than those

generated in rendering and manufacturing establishments and may be applied to the ventilation of privy vaults, which in cities are frequently so situated as not to be safely ventilated in any other manner. By connecting the vault with the furnace a draft downward through the seat-openings, may be maintained, and the bad air passed through the furnace and in great part destroyed.

While in New York I spent one evening very profitably in the company of Dr. C. B. White, of New Orleans, President of the State Board of Health of Louisiana. He gave me much interesting information concerning the epidemic of yellow fever in New Orleans, during the past summer. I was especially interested in the account of his method of dealing with it, and the apparent results. It may be stated briefly that his methods were based upon the view that in yellow fever the *locality* is infected, but the disease is not contagious, in the ordinarily accepted meaning of the term. The disease seems to spread just as it would if it depended upon a low form of vegetable growth, propagated along the surface of the ground and climbing up inclined or perpendicular surfaces. When a case appeared in a locality, one of the first things they usually did was to surround the locality with a belt of disinfectant. They employed for this purpose a solution of crude carbolic acid, which was sprinkled upon the street from a street sprinkler, making a belt about four feet wide entirely around the block or blocks in which the disease was located. Sometimes two such belts were sprinkled. Then the premises occupied by the patients were thoroughly disinfected, using a similar solution applied by a hand sprinkler. When a dwelling or room was to be disinfected, it was done with a solution of pure carbolic acid applied by means of a steam atomizer, and the walls, ceiling, and all articles in the room were subject to the spray. With a clear solution of pure acid even silk goods could be safely treated with the spray without damage. After the death of a pa-

tient the corpse and entire contents of the room and premises occupied were thoroughly disinfected. The clothing of the corps, of assistants who performed this duty was so saturated with vapor of carbolic acid that their immediate presence could be ascertained by the sense of smell; and not one of these officers contracted the disease, although some of them had never had it. One such lived in the same block where the disease prevailed, on premises immediately in rear of his own. He kept his premises well disinfected, and neither he nor his wife contracted the disease. Dr. White says that there was scarcely an exception to the statement that the disease did not cross the belt of disinfectant drawn around infected locality. In one or two instances, which at first appeared exceptional, it was ascertained that the new cases of disease outside of the belt were contracted by the persons remaining over night in the same building where yellow fever prevailed, and thus contracting the disease, they carried it to their homes outside the belt of disinfectant. Each new case made, according to the view acted upon, a new infected locality, which was treated as before, and its spread was apparently prevented thereby.

The regular meeting, which will also be the annual meeting, will be held on the second Tuesday in April.

The following resolutions was adopted: That a vote of thanks be tendered to Dr. Kedzie from the board for his valuable new oil tester.

On motion the following resolution was adopted:

Resolved, That it shall be proper for each member of the State Board of Health to report to said board facts which may come to their knowledge concerning the existence of any removable local cause or conditions, which may injuriously affect the public health of any city, village, town, or district in this State, and to make such recommendation for the removal of said causes as he may deem practical.

By request of the board Dr. Baker gave a brief histo-

ry of the organization and membership of the American Public Health Association, and an outline view of its proceedings at the last two meetings. He stated that at the last meeting he offered the following resolutions, which were adopted by the association :

Resolved, That a committee be appointed to prepare a form for a law providing for the organization of a National health department, or proper central organization, having relations to the Government and to the people relative to the interests of health and life similar to those of the Department of Agriculture, relative to the interests of agriculture, or of the Bureau of Education, relative to the educational interests ; that this committee be instructed to co-operate with similar committee or "section" of the American Medical Association ; that when a plan for a law shall be perfected, said committee be authorized to memorialize Congress for the enactment of such a law ; and that the committee report whatever action may be taken to this association at its next meeting.

Resolved, That in the appointment of this committee each State shall, so far as practicable, be represented by one member of this association ; that the Hon. Dorman B. Eaton, of New York, be the chairman, and that Elisha Harris, M. D., secretary of this association, be the secretary of the committee, the other members to be appointed by the President of the association.

PROCEEDINGS OF FOUNTAIN AND WARREN MEDICAL SOCIETIES.

This Society met at West Lebanon Thursday, January 8, 1874; Dr. Ross, of Williamsport, presiding.

The minutes of the previous meeting having been read and adopted, the president introduced Dr. Lomax, of Marion, as a delegate from the Grant County Medical Society, who being invited to address the meeting, did so, and explained the object of his visit, which was to urge physicians to form Societies in every county, and

then to become legalized corporations by recording their constitutions in the office of the county recorder, after having adopted a seal, which ought to be described in the record. Medical Societies thus organized would become legal corporations, and could take contracts to perform services in public institutions, as in jails, asylums, hospitals, and poor houses, and take charge of county poor under the orders of the proper county or township authorities.

On motion, the subject was referred to the committee on the constitution, consisting of Drs. Watson, Weldon, and C. V. Jones.

The committee to which was referred the amendment to the constitution which was offered by Dr. Weldon, reported that it was inexpedient at the present time, and that Dr. W. be allowed to withdraw the papers.

The committee on the constitution reported that they had prepared amendments to the constitution, which were submitted by sections and laid on the table for action at the next meeting.

The Secretary presented several communications. One from Dr. Douglas, Dean of the Faculty of the University of Michigan, informing the Society, in answer to inquiries, that no chair of Homeopathy would be established in that Medical school.

Dr. J. T. Rice, of Attica, reported and described a very interesting case of dropsy of the uterus.

Dr. Ross, of Williamsport, reported a fatal case of traumatic tetanus.

Dr. Weldon reported a case of cancer of the stomach,

SCRIBNERS' ILLUSTRATED MAGAZINE for Girls and Boys, conducted by Mary Mapes Dodge; November, 1873; Scribner & Co., 654 Broadway, New York.

In "days of auld Lang Syne," when *we* were boys, they did not have such things as the present magazine. Of illustrated periodicals there was either none or filled with geometrical diagrams, abortive attempts to de-

The reported cases were canvassed by the Society as fully as time would allow.

By general consent, it was ordered that the annual meeting in April next, be held at Veedersburg, for the greater convenience of a very large majority of the ~~similar to the one before us, to be the~~ *very young* by easily understood and attractive stories highly illustrated where the results of later thoughts. May the "coming man" look back upon the "St. Nicholas" of Scribner, with as fond remembrances as we do upon the veritable St. Nicholas himself. Not the least important, we are told that the conductor of the magazine is Mrs. Mary Mapes Dodge—that this is *not* Mrs. Mary B. Dodge, or Miss Mary A. Dodge, alias Gail Hamilton—but the author of "Hans Brinkton, or the Silver Skates." While we attend to more "solid" matter, let us not forget the young.

AN INQUIRY INTO THE NATURE OF THE UTERINE SUPPORTS and of the Causes of Displacements; by Samuel C. Busey, M. D., Washington, D. C.; Physician to the Louise Home, one of the Physicians to the Children's Hospital, etc.

We can not do better than make a few extracts from this pamphlet, to show the tenor of the doctor's argument:

"In regard to uterine displacements authors do not correctly and distinctly trace the relationship of cause and effect. Every conceivable influence, recognized co-existing lesion, or associated mal-relation has been denominated a cause of displacement, when, in fact, such morbid condition was simply an effect of the operation of a primary cause, which primary cause might have produced any one of the existing conditions antecedently to the others, or all simultaneously, or each might have followed consecutively in the chain of alterations, consequent upon the continuous operation of such cause. To illustrate: It is insisted by some that cystocele is the initial mal-relation in the causation of procidentia, and that relaxation of the utero- aeral ligaments is the morbid condition primary to retroversion, whereas clinical

observation, as well as sound reasoning, demonstrate that cystocele does not necessarily precede, as a cause, procidentia; nor ligamentous relaxation a retroversion. The uterine displacement and associated mal-relation may occur *pari passu*, or either may follow the other, or both may be consecutive results of the persistent action of a primary cause.

“These preliminary suggestions bring me directly to the consideration of the mode and manner of evolution of the essential force or forces concerned in producing uterine deviations, for I maintain that these displacements find their causes in the action of new forces generated by anatomical mal-relation, or in the irregular or disturbed operation of normal forces consequent upon anatomical mal-relation; and, *per contra*, that the uterus finds its support *in situ naturali* in forces due to normal anatomical construction and arrangement.”

“Accepting the conclusion of Weber that the body, in the erect position, is balanced upon the ilio-femoral articulations, and the theory of Duncan that the line of gravitation of the parts above is through a vertical line passing through these articulations, or the more commonly accepted view that the line of gravitation is through the axis of the body, as previously described; it is perfectly evident that the vertical line of pressure of the super-incumbent viscera can not be through the longitudinal uterine axis, but may be deflected from the anterior abdominal walls, against which it must impinge, through the line of the longitudinal axis, upon and against the fundus, and also, in a direct line, upon its attachments. Hence, it is that, usually, in virgins, and not unfrequently in multiparæ, when the uterus is healthy, that posterior axial deviations are the immediate result of some violent and sudden shock to the trunk, whereby this deflected force is momentarily increased beyond the natural resistance of the antagonistic influences, or is expended upon the anterior uterine surface, because the intestines are forced below the normal relation of the long axis. The same deflection of force would follow, as surely, though not with such momentum, relaxation of the abdominal parietes, which permitted such descent of the intestines below the umbilicus, as would change the line of vertical pressure to the direction of the longitudinal axis. Retro-

version and descent may result from such deflection of the natural force of gravitation of the abdominal viscera, to which may be added the auxillary force derived from muscular contraction or increased pressure of the superincumbent viscera; and thus it is that abdominal tumors, enlargement of the abdominal viscera, accumulation of fluid in the peritonæal cavity, tight and heavy clothing, diminished thoracic expansion, unusual and violent effort may occasion uterine mal-position—their agency being always enhanced by the inevitable mal-relation of parts consequent upon pregnancy. Thus it also is that sudden prolapsus is chiefly the result of abdominal pressure, concussion, straining, carrying heavy weights, lifting, stooping, etc.”

Many other points of interest are ably noted.

SMITHSONIAN MISCELLANEOUS COLLECTION, 266. The Toner Lectures, instituted to encourage the discovery of new truths for the advancement of medicine; Lecture I; on the structure of Cancerous Tumors and the mode in which adjacent parts are invaded; by J. J. Woodward, Assistant Surgeon, U. S. A.; delivered March 28, 1873; Washington, D. C.

The following notice is from Joseph Henry, Secretary Smithsonian Institute:

“The ‘Toner Lectures’ have been instituted at Washington by John M. Toner, M. D., who has placed in charge of a Board of Trustees, of which the Secretary of the Smithsonian Institution is one, a fund, ‘the interest of which is to be applied for at least two annual memoirs or essays relative to some branch of medical science, and containing some new truth fully established by experiment or observation.’

“As these lectures are intended to increase and diffuse knowledge they have been accepted for publication by the Smithsonian Institution in its ‘Miscellaneous Collections.’”

Dr. Woodward’s purpose, and the plan of his lectures, is expressed by himself as follows:

“I propose then, first, to sketch as briefly as possible the modern progress of our knowledge of the minute anatomy of cancerous growths, and to indicate some of the most important points as to which conflicting views still exist; I shall next select a few typical specimens

from the microscopical collection of the Army Medical Museum, and endeavor to show, with all modesty, how far the structural details they exhibit correspond with the results obtained by European histologists; where differences are to be noticed I shall not hesitate to point them out, and I hope to be able to present several significant matters of detail which have either been entirely overlooked or not described with the accuracy they deserve."

In illustrating his subject he made use of his photomicrograph apparatus to throw upon the screen seventy images of different specimens, prepared by himself.

In his text he speaks of the early opinion of Schwann, etc., who supposed cancerous germs to originate from free cell obtained from the blastema, thus placing such morbid products as special blood diseases.

Virchow arose, and in accordance with his general view, looked upon them as the offspring of normal connecting tissue, that primary blood dyscrasiæ did not exist.

Carl Thiersch announced the doctrine that such tissues were primarily from the epithelium cell of the lower soft layer of the epidermis, etc., and gradually encroached upon the connective tissue. His views are supported by the history of development of the embryo, it being philosophical to consider the epithelium element of cancer as originating from the supposed or embryotic layer, and not from the middle or connective tissue.

Prof. Waldeyer, of Breslau, extended the views of Thiersch to other varieties of cancer, other than the epithelium, as the various epithelium of different parts have peculiar characteristics, so the peculiarities of given cases of morbid growth is dependent, in a great degree, on such varieties of the normal tissue. Cancer of the mammary gland spring from the lining membrane of the tubes, etc. Cancer of the stomach from the gland of the mucus membrane, etc. Waldeyer also favored the opinion of the multiplication of cancerous

growth by cancerous emboli through lymphatics or nerves.

Dr. Classen concluded from investigations on cancer of the cornea, that the elements of cancerous growth were migrated with blood corpuscles; to this view the author inclines, although he "can not deny that transformation of the true gland tissue plays a certain role in the production of cancerous growth."

Billroth adheres to the views of Waldeyer, Rindfleisch, rather to those of Classen.

A number of specimens are presented, first of epithelium cancer, from which the author is inclined to the opinion that the growth is partly from cell multiplication, and partly from "wandering corpuscles" becoming fixed and developed into epithelium cells.

Other specimens of cancerous growth of the stomach, breast, lungs, etc., are shown and described. As to his final conclusions, we quote the following:

"And at this point the important question of prognosis thrusts itself again upon our attention. Can we be sure that a growth which has the anatomy of a cancer will have the history that is usually indicated by the word malignant; that it will ulcerate if left to itself; that it will recur if extirpated; that in either case similar growths will develop in some of the internal organs; and that the patient will surely die from this cause, if not from the primary disease? On the other hand if a tumor be extirpated which does not possess the anatomy of cancer; in which no proper cancer cylinders have been formed; as for example in the first case of mammary tumor to which I alluded this evening, can we be sure that the growth would not have ultimately acquired the cancerous anatomy if it had been let alone? Can we be sure that it will not, in spite of its timely extirpation, recur and prove fatal?

"A proper discussion of these important questions, based upon a consideration of all the evidence, would require much time and thought and be a work of no small labor and difficulty. Of course it can not be undertaken in the present lecture. Nevertheless it may not be amiss to state that the general tenor of surgical

experience would seem to give a negative answer to both these important questions. With regard to the first, the negative answer is the justification of the operation of extirpation, still so generally resorted to, and the motive for urging operative interference as early as possible. It implies a more or less confident belief in the local significance of the primary lesion, and it is not inconsistent with the circumstance that practically the majority of tumors, which on extirpation prove to have the anatomy of cancer, do in fact recur, for the incomplete extirpation of marginal portions of the primary growth, or the existence already at the time of the operation of small secondary growths in distant organs, will sufficiently account for this result, without any more violent suppositions.

“On the other hand the negative answer to the second question might have been anticipated on purely anatomical grounds, since it would seem that in every cancer there must be a period when the small-celled infiltration of the connective tissue, and perhaps some increase in the number of the epithelial elements of any glandular part involved, is all that has taken place, and whenever this process commences simultaneously in a comparatively large area instead of in a small one—in the whole mammary gland for example instead of in a small part of it—the size of tumor may lead to its extirpation before its anatomy has become characteristic.”

Such works as this of scientific investigators will if only a moiety of truth is contained therein, advance medicine as a science, and aid the applications of *art*.

Editorial.

INSANITY AND CRIME—THEIR CAUSES AND PREVENTION.

That crime exists to a fearful extent, among the young and old, we need not be told, or that pauperism abounds with work enough and pay sufficient to save from such

a fate, is a fact patent to every one. That the cause of this crime as well as the source of this pauperism, may be known to a few is probable, but by the many it is looked at in simple wonder; they see the law baffled in preventing or punishing the one, and society impotent to stay or remedy the other, and knowing they have not the power to act where those fail, they are paralyzed in their efforts and blunted in their feelings.

He who looks into the matter properly, will see that although remotely the cause of crime may be legions, they all concentrate into a few; among the most prominent are pauperism and bad educational surroundings, and conversely that the cause of pauperism in this country at least is, to a large extent, from *willful*, not *forced* idleness and bad surroundings.

If such are the causes of crime and pauperism, what is necessary for their prevention and punishment? For both deserves punishment in the exact degree as the above causes are found to operate in any given case. As to the punishment of the more frequent crimes we have nothing to say, they are provided for in perhaps the best manner possible, all things considered. But for the minor offences, and for the youthful criminal especially, we consider no adequate means have been provided.

If crime results from pauperism and bad educational surroundings, pauperism must be corrected and the surroundings changed before any good will result. But pauperism is from idleness and other bad surroundings, therefore at the root of the tree lay the ax. The penitentiary is not the place for the offenses we are considering, and if they were the State would be bankrupt in building them; jails are but temporary bastiles, and were never supposed to be suitable for punishment, either reformatory or preventive; the houses of refuge, even if the system was capable of extension as broadcast as is the population, is not of sufficient practical value

to supply such wants. Though the idle and vagabond criminals may not be numerous in any one place, they are collectively a host, and the petty or minor crimes connected with such, and that call for restraint or punishment would so heavily tax the people to provide means for such ends, that justice would forbid as well as popular opinion condemn any movement contemplating sequestration as preventive or the curtailment of liberty as punishment for such crimes, not having associated therewith, and indeed, having as an essential, a self sustaining, nay, a *producing* element. The surroundings must be improved, and work *forced* upon the wilful idle, such work as will not deplete the honest revenue, but rather add thereto, or at least support those who perform it. Such is the most efficient *direct* means for remedying the crime-producing pauperism and vagabondism that now so largely prevails. But this coercive work with confinement as accompaniment, has an important *indirect* effect in checking crime, often through the elements of example and fear in supplying incentives for industry, and thus leading out of pauperism and often through the same elements decidedly subduing the most insubordinate and checking the most vicious.

Common sense must indicate the course to pursue, and the gibbering of legal technicalities and pseudo-philosophy must give place to the teachings of practical life. But apart from those elements, willful idleness and bad surroundings leading to pauperism and ending in crime, there is the well recognized *dangerous class*, who are controlled or influenced by a more than usual *faulty organization*, added to those circumstances that leads or drives the other into crime. From these the rank of criminals are largely recruited; 'tis not that they are *insane*, as some superficial observer contends, but that as their organization deviates more or less from a certain normal standard, they are from that cause alone more and more liable to take on abnormal and humoral aspects, to enter

more readily into *bad surroundings*, more disposed to *indolence*, and as a consequence to pauperism and crime. Or if, with the few, their condition in life prevents the application of the term *pauperism*, still their *indolence* and *bad surroundings*, (which they will find,) added to the increased development of faulty habits, disposition, etc., the direct resultant of *bad organization*, uncontrolled by the influence of fear or a dominating authority, leads as direct to crime in this as in the former case.

This *dangerous* class then, when in any case they can be identified, should be placed in the same condition as to forced work, restraint of liberty, and subordination to authority, as that of the first class, whose organization was not so faulty, but whose *surrounding* gradually educated them into pauperism and crime.

But it is not crime alone that we would restrain or punish by this work-house system—*insanity* would to a great extent be prevented. It is without doubt true that insanity increases with civilization. We shall not stop to account for it in full, but if insanity was the only curse of humanity, a barbarous people would be the happiest.

It is also true that a large proportion, two-thirds or three-fourths, of the insane are from the pauper class, and that a large proportion from this class fall under one of the two classes we have mentioned above, where willful idleness and bad surrounding *alone* have led to pauperism, or where in addition a more than usual faulty organization was added as a cause, so that it logically follows that the same means adequate or necessary to prevent *crime*, is applicable to the prevention of a proportional amount of *insanity*.

It needs no argument to show that this is very far from saying that crime and insanity are the same, for if so then are we all insane; we can not reason ourselves into such a belief, for the lights of common experience as well as our own consciousness gives it the lie.

'Tis said "the inflamed passions are near akin to insanity," and brutality being a deficiency of moral sentiments, agrees in all respects with moral insanity, the *acts* may indeed be the same, and to him who makes no distinction it is useless to offer arguments, but even if they were, reformatory punishment would not be out of place, and preventive means would apply as readily as in the other view.

The remedy for a large proportion of crime and insanity, in accordance with views expressed, is to be found in a *work house* system. Here the youthful desperado will be snatched from his bad educational surroundings, and through discipline and example educated properly, even the *dangerous class*, oppressed by a more than usual bad organization, would receive the same benefit, for even the idiot can be *educated* in a greater or less degree, as Sequin has most clearly shown.

This is no new idea, nor has the trial test to be made to prove its efficiency. It is true, it has seldom been carried quite far enough, but that it may and can be managed to satisfy our most sanguine expectations is equally true, all this can be accomplished as we have above asserted without expense to the public save in the initiatory step, self sustaining and productive in its nature as it is. Never until we have a work-house system, with perhaps asylum attachments, where temporarily any acute cases of insanity could be treated until sent to the asylum already instituted for their reception, will we know how or have the power to handle the youthful criminals, or any of the classes enumerated in this article. A thousand crimes and a thousand regrets, numerous arrests only be turned adrift again, acts of incipient or full fledged insanity, investigated at enormous cost, and whether found guilty or innocent, equally impotent to suggest a remedy adequate, all this and more can be safely, cheaply, and surely remedied if the State and

municipal governments act with wisdom, and are guided by experience and common sense.

Of course we would have a system of reform connected with such a scheme, rewards and punishment should be the means used, the machinery for conducting which could be easily arranged.

Indianapolis being, if not the centre of the earth—as the magical map of the Indianapolis *Sentinel* would indicate—still the centre of the State, should *at once* take steps to introduce the subject, guided by the light of other experiments and profiting by their mistakes and successes, it could be made successful, and finally would permeate the whole State.

THE December number of *Wood's Household Magazine* is replete with good reading—entertaining sketches, stories, poems, etc. Address *Wood's Household Magazine*, Newburgh, N. Y.

WE have received a copy of the *Illustrated Living World*, a holiday of the *Illustrated Record*. It is a pictorial paper full of spicy bon-bon. Address, *Illustrated Record*, P. O. Box 2141, New York.

IN the Editorial giving the History of Medicine in this city, we omitted to place the name of R. N. Todd, M. D., as one of the Board of Directors of Bobbs Medical Library; also, that Dr. John Kitchen was prominent in resurecting the City Hospital; and again, that Dr. Woolen and Dr. Jameson were omitted in our list of Hospital staff.

FOR SALE—The property of a physician in Richmond, Ind. The property consists of a two story brick, of twelve rooms, office attached of two rooms, barn and other buildings in good order, good cellar and water. It is one-half square from the business center of the city. Practice of eighteen years duration, worth \$5,000, both medical and surgical, to go with property. Enquire of real estate dealers, Cloggshall & Dickinson, Richmond, or the Editor of this Journal.

Obituary.

IN MEMORIAM.

The following resolutions were passed at the late meeting of the "Fountain and Warren County, Medical Society.

It becomes the melancholy duty of the Fountain and Warren County Medical Society, to announce to its friends and to the public, that it has pleased the great Creator, to remove our colleague and brother, Doctor Robert Stevens, of Chambersburg, from this life.

Dr. Stevens died at his residence near Chambersburg, in Fountain County, on the 12th day of August last, aged about 60 years. He read medicine in the office of a respectable physician in his native State Virginia, and came to Indiana about 1835. In the year of 1838, he settled near Van Dorn's Mill, on Coal Creek, afterwards removing to Chambersburg, in or near which he dwelt and practiced his profession until his death.

He established at an early day, a wide-spread reputation by his successful treatment of milk-sickness, a disease which was the scourge of the then new country, a reputation he maintained throughout his whole life.

Dr. Stevens was among the first members of this Society, having joined it on the 25th day of May, 1867. He earned the respect of his medical brethren by his quiet, modest and unostentatious demeanor, and of his friends and neighbors, by his habits of industry and sedulous attention to his business and by the honorable and conscientious discharge of the duties of an onerous profession in a sparsely settled country.

Therefore be it resolved, that the Society give expression of its sense of its loss, and of respect for the memory of our deceased colleague, by placing this obituary notice and memorial resolutions upon its records, and by

furnishing the family of our deceased brother with an engrossed copy thereof.

JUSTIN ROSS, President
SAMUEL J. WELDON, Sec'y.

IN MEMORIAM.

It is with feelings of the most profound sorrow that the Society have to announce to the profession the death of their estimable colleague, Dr. W. Leyman, of Attica, who died at Ft. Wayne, Ind., on the 24th day of July, 1873.

Dr. Leyman died the age of 64, was a graduate of the Jefferson Medical College, of Philadelphia, Penn. He entered the field previous to becoming of age, and continued in practice with a few short intermissions, until a short time previous to his demise. Being engaged in the active duties of the profession near 50 years, he was ever ready to administer to the wants of suffering humanity, be the call from the affluent or the cold and uninviting recesses of poverty. The community of his fellow-citizens in the field of his achievements are fully aware of the fact that a great light in the medical profession as a practitioner has been extinguished and

WHEREAS, The greatest Physicians has seen fit to call him away.

Resolved, That we express our deepest sorrow at the great loss which the Society has sustained, and in adding tribute of reverence, the Society is content to rest his memory upon the deeds of his life more eloquent and lasting than the eulogy of men.

Resolved, That a copy of memorial and resolutions be sent to the Fountain and Warren County papers for publication, and a copy sent to the family of the deceased.

JUSTIN ROSS, President.
SAMUEL J. WELDON, Sec'y.

Miscellaneous.

HOW TO VENTILATE SCHOOL-HOUSES.

Abstract of Paper read before Michigan Medical Society, by R. C. Kedzie.—The ventilation of a school-room is so intimately associated with the warming of the same, that the two cannot be satisfactorily considered separately. "Warmth must be obtained as the first demand of nature, and without it civilization will go back. When men are cold they devote themselves to physical exercise; and if that is impossible, to discomfort, in which the mind refuses to do more than to complain if it cannot forget." A poorly warmed school-room defeats the very object for which a school exists, by preventing all mental activity except grumbling, which needs no special culture.

In my estimation, no ventilation is good which requires the opening of doors and windows at any time. Window ventilation is often used in warm weather, but I consider it undesirable, because it admits insects, dust, hot air; *i. e.*, air hotter than might be secured by properly arranged air-ducts, which may be so contrived as to introduce comparatively cool air. But window ventilation certainly should never be used in cold weather, while the scholars are not taking active exercise. It is never necessary in good ventilation.

Ventilation should, as far as possible, be automatic, and should be beyond the control of every one except the person who has it in charge. This self acting ventilation may best be secured by combining the ventilating system with the warming apparatus, so that the active condition of the warming apparatus shall necessitate an active ventilation; because we are much more sensitive to a change of temperature than we are to the stupefying influence of foul air.

The construction of school-houses in this State is very

faulty, because in the original plan little or no attention is given to ventilation, whereas it is one of the first subjects which should receive consideration. In the original plan it is very easy to provide for good ventilation; but when once the building is erected, it is impossible to introduce good ventilation without greatly disfiguring the building. The air-ducts should be abundant, but should be kept out of sight. The most natural and economical position is the space beneath the floor, between the joists. These can all be connected with the ventilating shaft by having the joists all lead toward the shaft, and the spaces connected with it. But the joists often cut at right angles the line leading through the centre of the room to the ventilating shaft, or beam, which is the principal support of the centre of the floor, prevents all communication with the shaft. These and other considerations show how important it is to provide for the ventilation in the original plan of the building, and not to introduce it as an after thought.

The ventilating shaft should be placed entirely within the building,—in its centre, if practicable. This interior position should be given it, in order to secure so high a temperature in the shaft as to insure motive power enough for ample ventilation by the waste heat of furnace. It should be of sufficient size, but not too large. If too large, there being danger of return currents of cold air by the side of the shaft. The size of shaft may easily be estimated by the rule adopted for ventilation in the British army, viz: ten square inches of sectional space in the shaft for each person. In the centre of this shaft I would place the pipe to convey away the smoke, etc., from furnace, and thus utilize the waste heat to warm the shaft. In order that each room may receive its own share of ventilation, and to prevent the foul air of one room from being driven into another room when high winds prevail, I would divide the shaft space outside the smoke pipe into two or four shafts, by having

two or four plates passing from the whole length of the smoke pipe, radiating till they strike the sides of the shaft. These long vertical plates can be riveted to the sides of the smoke pipe, and at their other edge be imbedded in the brickwork of the shaft, and thus secure two or four shafts equal in size, and each exposed to the same amount of heating surface in the smoke pipe. If properly constructed, these air spaces will not communicate with each other, but be perfectly distinct shafts throughout. It will therefore be impossible for one of these shafts to rob or interfere with the action of another. One of these shafts may be devoted to ventilating one room or floor, and the others may perform a like office for others. Into these ventilating compartments of the main shaft, the foul-air ducts enter at once from the floor level of the room to be ventilated.

The smoke pipe should be of a large size (say 12 to 16 inches in diameter), to insure the perfect removal of smoke and all products of combustion, and also to afford heating surface to the shaft. By a little skill in arrangement it will be easy to heat this central pipe by a small stove in basement in summer, and thus secure good ventilation in the hottest weather without warming the building in the least. The inlet ducts to admit fresh air, whether it is hot or cold, should have same sectional area as the educt pipes for foul air, viz: ten square inches for each person. The practice, altogether too common, is to make these registers for admitting warm air much smaller than I have indicated, and to admit the air at a very high temperature, *i. e.*, a small amount of very hot air instead of a large amount of warm air. The air should never be admitted at a temperature above 75 degrees. These red hot furnaces are an abomination which should never be tolerated in a Christian community. They should be banished to that region where it is said "they don't cover up the fire at night."

You may say that there is but little hope that school

buildings will be so constructed as to secure the abundant ventilation here recommended. Still, I would hold up the ideal, which must become *real* before our schools shall meet the demands of the age. A writer has well said that when the proper and fitting thing to be done is once clearly pointed out, it generally contrives to get itself done in the long run. A proper temperature as the first condition of mental activity, and the removal of carbonic acid, which "lowers the vitality and kills with indefinite warning," are prime conditions for the development of a nation that is yet to rule the world. We have abolished the choking of our worst criminals by the hangman's rope; let us abolish the strangling of the innocent children by viewless ropes of poisoned air.

LOCALIZATION OF THE FUNCTIONS OF THE BRAIN.—We are all agreed, Dr. F. said, that it is with the brain we feel, and think, and will; but whether there are certain parts of the brain devoted to particular manifestations is a subject on which we have only imperfect speculations or data too insufficient for the formation of scientific opinion. The general view is that the brain as a whole subserves mental operations, and that there are no parts specially devoted to any particular functions. This has been recently expressed by so high an authority as Professor Sequard. The idea rests chiefly on the numerous facts of disease with which we are acquainted. There are cases where extensive tracts of brain are destroyed by disease, or removed after a fracture, apparently with no result as regards the mind of the individual. Along with these facts we have others which are very curious, and which hardly seem to agree with this doctrine. One of these is that when a certain part of the brain is diseased, in aphasia, the individual is unable to express himself in words. Other curious phenomena have been well described by Dr. Hughlings-Jackson—viz., that certain tumors or pathological les-

ions in particular parts of the brain give rise, by the irritation which they keep up, to epileptiform convulsions of the whole of one side, or of the arm or leg or of the muscles of the face; and from studying the way in which these convulsions show themselves he was able to localize very accurately the seat of the lesion. The great difficulty in the study of the function of the brain has been in the want of a proper method. When we study the function of a nerve, we make our experiments in two ways. In the first place, we irritate the nerve by scratching or by electricity, or by chemical action, and observe the effect; and in the second place, we cut the nerve, and observe what is lost. In regard to the brain and nervous system, the method has been almost entirely, until recently, the method of section. It has been stated by physiologists that it is impossible to excite the brain into action by any stimulus that may be applied to it, even that of an electric current; they have, therefore, adopted the method of destroying parts of the brain. This method is liable to many fallacies. The brain is such a complex organ that to destroy one part is necessarily to destroy many other parts, and the phenomena are so complex that one cannot attribute their loss to the failure only of the parts which the physiologists have attempted to destroy. About three years ago, two German physiologists, Fritsch and Aitze, by passing galvanic currents through parts of the brains of dogs, obtained various movements of the limbs, such as adduction, flexion, and extension. They thus discovered an important method of research, but they did not pursue their experiments to the extent that they might have done, and perhaps did not exactly appreciate the significance of the facts at which they had arrived.

I was led (said Dr. Ferrier) to the experiments which I shall have to explain by the effects of epilepsy and of chorea, which have been supposed to depend upon irritation of parts of the brain. I endeavoured to imitate

the effects of disease on the lower animals, and determined to adopt the plan of stimulating the parts of the brain by electricity after the manner described by Fritsch and Hitze. I have operated on nearly one hundred animals of all classes—fish, frogs, fowls, pigeons, rats, guineapigs, rabbits, cats, dogs, jackals, and monkeys. The plan was to remove the skull, and keep the animal in a state of comparative insensibility by chloroform. So little was the operation felt that I have known a monkey, with one side of the skull removed, awake out of the state induced by the chloroform, and proceed to catch flies or eat bread and butter. When the animal was exhausted I sometimes gave it a little refreshment, which it took in the midst of the experiments. Referring next to his experiments on cats, Professor Ferrier stated that on applying the electrode to a portion of the superior external convulsion the animal lifted its shoulder and paw (on the opposite side to that stimulated) as if about to walk forward; stimulating other parts of the same convolution, it brought the paw suddenly back, or put out its foot as if to grasp something, or brought forward its hind leg as if about walk, or held back its head as if astonished, or turned it on one side as if looking at something, according to the particular part stimulated. The action produced by stimulating the various parts of the middle external convolution were drawing up of the side of the face, a backward movement of the whiskers, a turning of the head, and a contraction of the pupil respectively. A similar treatment of the lower external convolution produced certain movements of the angles of the mouth; the animal opened the mouth widely, moved its tongue, and uttered loud cries, or mewed in a lively way, sometimes starting up and lashing its tail as if in a furious rage. The stimulation of one part of this convolution caused the animal to screw up its nostrils on the same side; and curiously enough, it was that part which gave off a nerve to the nostril of the

same side. He then explained in like manner the results produced by the stimulation of corresponding or homologous parts of the rat, the rabbit, and the monkey. Acting upon the anterior part of the ascending frontal convolution, the monkey was made to put forward its hand as if about to grasp. Stimulation of other portions acted upon the biceps, or upon the zygomatic muscles. The part that appeared to be connected with the opening of the mouth and the movement of the tongue was homologous to the part affected in man in cases of aphasia. Stimulation of the middle part of the temporo-sphenoidal convolution produced no results; but the lower part of the temporo-sphenoidal, when acted upon, caused the monkey to shut its nostrils. No result was thus obtained in connection with the occipital lobes. These experiments, he said, had an important bearing upon the diagnosis of cerebral disease, and the exact localization of the parts affected. He was able to produce epileptic convulsions in the animals experimented upon, as well as phenomena resembling those of chorea. The experiments were also important anatomically, as indicating points of great significance in reference to the homology of the brain in lower animals and in man, and they likewise served to explain some curious forms of expression common to man and the lower animals. The common tendency, when any strong exertion is made with the right hand, to retract the angle of the mouth and open the mouth on the same side, has been stated by Oken, in his *Natur-Geschicete*, to be due to the homology between the upper limbs and the upper jaw; the true explanation being that the movements of the first of the mouth are in such close relation to each other that when one is made to act powerfully the impression diffuses itself to the other parts of the brain, so that the two act together. The experiments had also a psychological significance. There was reason to believe that when the different parts of the brain

were stimulated, ideas were excited in the animals experimented upon, but it was difficult to say what the ideas were. There was, no doubt, a close relation between muscular movements and certain ideas which would prove capable of explanation. This was supported by the phenomena of epileptic insanity. The most important guide on the psychological aspect of the question was the disease known as aphasia. The part of the brain which was the seat of the memory words was that which governed the movements of the mouth and the tongue. In aphasia the disease was generally on the left side of the brain, in the posterior part of the inferior frontal convolution, and it was generally associated with paralysis of the right hand; and the reason might be supposed to be that the part of the brain affected was nearly related to the part governing the movements of the right hand. It was essential to remember that the movements of the mouth were governed bilaterally from each hemisphere. The brain was symmetrical, and he held it to be a mistake to suppose that the faculty of speech was localized on the left side of the brain. The reason why an individual lost his speech when the left side of the brain was diseased was simply this: most persons were right-handed, and therefore left-brained, the left side of the brain governing the right side of the body. Men naturally seized a thing with the right hand, and they naturally therefore used rather the left side of the brain than the right, and when there was disease there the individual felt like one who had suddenly lost the use of his right arm. After describing some further experiments on pigeons, Professor Ferrier alluded to the results of stimulating the different ganglia. Stimulation of the corpora striata caused the limbs to be flexed; of the optic thalami produced no result; of the corpora quadrigemina produced when the anterior tubercles were acted upon, an intense dilation of the pupil, and a tendency to draw back the head and extend the

limbs as an episthotonos; while the stimulation of the posterior tubercles led to the production of all kinds of noises. By stimulating the cerbellum various movements of the eyeballs were produced.

MIGRATION OF WHITE CORPUSCLES.—Dr. Thomas read before the German Association of Naturalists at Weisbaden, a paper on the migration of white corpuscles into the lymphatics of the tongue of the frog. He injected the lymphatics of the living animal with an extremely dilute solution, not containing more than from 1-2000th to 1-8000th part of nitrate of silver, and found that, with certain precautions, this did not lead to stasis of the blood in blood-vessels, but only to a lively exodus of the white corpuscles from their interior. After the lapse of some time, when the parts had begun to recover from the injurious effects of the injection, he was able to observe the re-entrance of the corpuscles into the lymphatic vessels through certain stomata in their walls, now marked and rendered distinct by a precipitate of the silver salt. In a second series of researches the lymphatics were injected with a dilute emulsion of cinnabar in a three-quarter per cent. solution of common salt. The cinnabar was in part deposited in the stomata of the lymphatics, and partly passed through them, and was deposited in the tissues in the form of small, round cloudy patches. The evidence of the identity of the stomata brought into view by means of cinnabar, with those rendered apparant by means of nitrate silver is obtained by observing their peculiar grouping, and by the subsequent injection of nitrate of silver into the same vessels. The injection of cinnabar causes very little disturbance of the circulation. If a lively exodus of the white corpuscles from the blood-vessels be produced by making an abrasion of the surface, the migrating cells quickly make their appearance in the stomata of the lymphatics marked out by the cinnabar. They then take up the particles of cinnabar into their interior,

which causes them to lose their activity, and accumulate in the stomata. They then appear in the form of cauliflower excrescences projecting into the interior of the lymphatics, which gradually break up into their constituent cinnabar-holding cells. These may be traced into the larger vessels, and from thence into the blood. In these researches a remarkable regularity or uniformity in the track pursued by the white corpuscles was observed. They pass away from the blood-vessels nearly at right angles into the tissues, their course, however, in a series of short zigzags. They all appear to travel at about the same pace.—*Lancet*, October 25, 1873.

CAUTERIZATION OF THE UTERINE CAVITY.—We transcribe the following from the *Lyon Medical* for December, 1873:—

Dr. Blanchard (thèse pour le doctorat, par M. Joseph Blanchard, Paris, 1873) belongs to the school of those gynecologists, who in uterine affections attribute much to the body of the womb. He does not admit with Bennet that metritis of the neck is the rule and metritis of the body the exception. He shows on the contrary that the inflammation, fungosits, and ulcerations are most ordinarily found in the mucous membrane which lines the cavity of the body. Threapeutic means addressed only to the lesion of the neck are completely insufficient. The disease must be followed to the superior orifice of the cervical cavity.

Among the means to this end, M. Blanchard has specially studied astringent and caustic injections, painting the internal face of the body by means of a brush dipped in nitrate of silver or other solutions, and above all by means of medicated pencils introduced into the womb. Among injections he mentions those made with decoction of oak bark, tincture of iodine in water, iodide of iron, perchloride of iron and glycerine. The author says that after this practice he has unhappily seen a certain number of cases of peritonitis develop. These ac-

cidents are not due to the passage of some of the injection into the tubes. The experiments of Vidal de Cassis, of Klemm, Petit, and Astros, have shown that the penetration of the injection into the peritoneal cavity is nearly impossible in the conditions in which intra-uterine injections are made. The peritonitis is due to the presence of a peri-uterine inflammatory centre, which is lighted up by the impression produced on the uterine mucous membrane. One is protected from such accidents by carefully exploring before the operation all the points of the true pelvis, and by abstaining every time one discovers the least trace of peri-uterine inflammation. That is a formal contra-indication, which, moreover, is common to two other means of medication which Dr. Blanchard passes in review.

Painting the uterine mucous membrane is done by means of a canula which is placed in the cervical cavity, and through which the brush is passed.

M. Nonat and M. Courty are able in this way to paint the whole cavity of the uterus with astringent or caustic solutions, tincture of iodine, or nitrate of silver.

The introduction of medicated pencils into the uterine cavity has most particularly fixed the attention of M. Blanchard. M. M. Becquerel and Rodier have employed long pencils composed of gum tragacanth, mixed with alum, sulphate of copper, sulphate of zinc, or tannin. This last substance alone has given good results.

Recourses has been had to pencils of nitrate of silver. But the caustic which M. Blanchard prefers is a mixture of nitrate of silver and nitrate of potash. These are the pencils which he has seen used in the service of M. Laroyenne. He describes with care the operative proceeding, precautions and contra-indications of this method of treatment, relates six cases of cure obtained in case of chronic metritis, and terminates his interesting work by the following conclusions:—

1. Introduced into the uterine cavity, the pencil of

nitrate of silver and potash is a completely inoffensive agent.

2. It may be left in the cavity if it be necessary to profoundly modify the mucous membrane.

3. Its employment is formally contra-indicated in all inflammatory states of the uterine annexes, or adjacent tissues.

4. Its application has been followed by cure in cases of abundant leucorrhea, chronic metritis of a hemorrhagic character, and occlusion of the internal orifice of the neck with retention of the secretions.

5. In the case of metritis developed under the influence of a fibroma or deviation of the uterus, it gives marked ease, and often causes the disappearance of the greater part of the symptoms; but not acting on the cause, it does not save the patient from relapses.—*British Obstetric Journal.*

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Original Communications.

CASE IN PRACTICE.

BY ANANIAS CULLISON, M. D., OSAGE MISSION, KANSAS.

Was called June 14, 1873, to see Mrs. M. C., age about twenty-three years. I found her suffering with the following disease:

Phlegmasia Dolens, with which she had been suffering for fifty-six hours.

Supposed Etiology.—The ninth day after parturition Mrs. M. C. worked in the garden sometime, and on the night of the tenth day she went one quarter mile to a country “hoe-down,” and danced. She returned to her home at 11 o’clock, P. M., and was seized immediately with a severe chill.

Symptoms.—Severe chill June 12th, followed by high fever; great pain in epigastrium and uterine region. Dr. Clark, her attending physician and father-in-law, had the case under consideration June 12–13, and gave hydrate of chloral as a sedative, and applied a hot hop fomentation over abdomen. When I first saw the patient, I found her in the following condition: Fever, which was

remittent in character; temperature $104\frac{1}{2}$ degs. Fahr. in axilla; pulse 130 per minute; the tongue furred and of a whitish color; breath fetid; bowels loose, discharge watery and very offensive; acute pain in region of spleen; slight tenderness of the uterus; lancinating pain in upper part of the thigh, with swelling and firmness; inability to move the right leg, in which the pain was seated. The mammaries had ceased to secrete; previous to this their secretions had been very abundant; lochia ceased; sleeplessness; copious perspiration over the whole body; loathing of nourishment.

Treatment.—First prescription, quinine and morphia combined, each two hours until rest was secured, then quinine alone. Local application—Mustard draught over the region of the spleen; lubricated the abdomen and thigh with turpentine and lard; placed a large flannel cloth over the entire thigh and hip, over which I placed a roller bandage from the knee to the ilium, by passing the bandage around the hips. This lubricating and bandaging the body was repeated each four hours.

June 15, 9 o'clock, A. M.—Symptoms same as yesterday, only less pain. Patient slept some during the night. *Treatment.*—Two doses of chloral, combined with Dover's powders, followed by epsom salts; lubricated the thigh with equal parts of hartshorn, turpentine and olive oil, bandaged as before, repeated every four hours.

June 16, 9 o'clock, A. M.—Dr. E. Robbins, my partner, with me. Patient better; fever 102 degs. Fahr.; pulse 110; could move the afflicted limb; swelling assuaged; pain and soreness abating. *Treatment* same as yesterday.

June 17, 10 o'clock, A. M.—Patient convalescing finely. Temperature 98 degs. Fahr.; pulse about normal. Patient takes nourishment, and suffers but little pain. Quinine, Port wine and nutritious diet the continued treatment, with local application of the hartshorn liniment. Left the patient with the promise of visiting her June 19th.

June 18, 10 o'clock, A. M. — Patient sat up and had her bed and clothing entirely changed. At 12 o'clock, M., was seized with a chill, which proved to be the invasion of a grave attack of cerebro-spinal meningitis.

I was called at 5 o'clock, P. M. Dr. Robbins was also called in a short time, and we found the patient in the following condition: Temperature 110 degs. Fahr.; pulse 140 per minute; tenderness at the back of the neck and dorsal region of the spine; breathing oppressed; copious sweating; conjunctiva congested; raving delirium, and dullness of intellect; the muscles of the nape of the neck rigid and contracted; eyes convergent; pupils much dilated, with dimness of vision.

Treatment.—Quinine and opium; ice to the head; mustard to the feet, ankles and wrists. Nothing done gave her any relief. Thirteen hours and forty minutes after the attack, death relieved her of her sufferings.

TWO CASES OF RETAINED PLACENTA FROM MORBID ADHESIONS.

BY WESLEY WILSON, M. D., YANKEETOWN, IND.

CASE 1ST. — Was called to see Mrs. M. T. aet. 21, in first pregnancy, Aug. 10, at 6 A. M.; ascertained from her that the first indications of labor had become noticed at 10 P. M.; found the os dilated to the size of a nickle at my first examination, and diagnosed a vertex presentation. In the first position, pains came on slowly, the patient being rather a delicate subject. At 10 A. M. found os well dilated and soft parts dilatable. I then administered tr. ergot in 3ss. doses. Pains came on with force and regularity, and the foetus was soon expelled, being a large male. After ligating and severing the cord, I waited a proper time for the pains to come up to expel the placenta, and by friction on the abdomen and grasping the uterus with the hand, the pains came on, but the

placenta failed to be expelled. Hemorrhage had been going on all the time, to a considerable extent. On making traction on the cord, it failed to come away. I found the os closing, and the hemorrhage going on. I decided to introduce the hand into the cavity of the uterus and get the placenta away. I introduced the left hand gently, and gradually dilated the os till I was able to reach its attachment, which was near the fundus, over the opening of the left fallopian tube. By getting the fingers under the partially detached edge, I succeeded in pulling it off from the walls of the uterus whole. The attachment was of a fibrous character. The uterus contracted well, and the hemorrhage ceased. My patient made a good recovery.

In this case I will say that I treated the patient twice for threatened abortion, at the $4\frac{1}{2}$ months, caused by intermittent fever, and at the 7th month, as the result of an injury caused by a fall.

CASE 2D.—Mrs. M. M., aet. 19, first pregnancy; rather delicate. Was called to see her on Sept. 19, at 4 A. M. Had been attacked the day previous with intermittent fever, and had made a visit some three miles from home, in a two-horse wagon; had arrived at full time. On examination I found no dilatation of the os uteri, but uterus low down in pelvis. Complained of considerable pains, but of the false variety, as they did not effect the uterus, as I could detect by manipulation. Gave an anodyne of opim. pulvis. grs. i, every hour and a half till rest was procured; then ordered quinine sulp. gr. ii, every two hours during the intermission.

September 20th, was called at 12 P. M., and found my patient in the same condition I had found her the previous day. Repeated my former prescription, with the same result.

September 21st. Was again called at 4 P. M. Found my patient laboring under the same class of symptoms that I had found at my former visit—no dilatation of the os; same condition as the evening previous. My opiates gave re-

lief, not entirely, however. At 5 A. M., I left her, with instructions to let me know if the pains grew worse. I went to my office, and then went to the country three miles, to see another patient. Shortly after leaving her, labor set in and the fœtus was rapidly expelled. The messenger came to notify me, and not finding me, came in pursuit of me. When I arrived nothing had been done, and the hemorrhage was going on profusely. I at once ligated and severed the cord. The hemorrhage had began to tell upon the patient plainly. A pool of blood was in the bed, and bleeding still going on. Gave tr. ergot, used friction, and grasping the uterus, pains came, but the placenta still adhered. Knowing no time was to be lost, I introduced the hand, dilated the os and detached it, as in the case before; but on examining the placenta after delivery, I found some small pieces still remained; but my patient was too weak to repeat the operation, and I decided to trust to the process of nature to throw them off. The uterus contracted well, and the hemorrhage ceased. The intermittent continued despite the effects of anti-periodic treatment; and on the 25th of September, six days after the first attack, she died during one of the cold stages preceding the fever.

During all the time from the beginning of the attack till death, there was a diarrhœa that the best astringents failed to control. Acetate lead, morphine, opium, tanic acid were given, but all failed. The obstinacy of the diarrhœa and fever was a little remarkable in this case.

CASE OF INVERSION OF THE UTERUS.

RY G. W. H. KEMPER, M. D., MUNCIE, IND.

February 24th, 1873, I attended Mrs. B., age 33, in her sixth labor. At 3 P. M., without any pain, the waters were discharged, and pains supervened at once. At 5 P. M., the os was one-half dilated; head presenting — first

position. The pains were short and regular; the child—a large sized male—was born at 9:30 P. M.

I maintained pressure over the uterus, and at the expiration of ten minutes I detected a portion of the placenta protruding through the os. After this I made several moderate tractions upon the cord. In fifteen minutes after the birth of the child, a violent pain came on which expelled the placenta beyond the vulva, and completely inverted the uterus. My first suspicion of an inversion, was caused by the uterus escaping my grasp above the pubes, and disappearing into the pelvis.

There was no unusual amount of hemorrhage, and her pulse was good. There was not the least tendency to shock, and the woman was not aware that anything unusual had occurred, until I began its reduction. Without waiting for chloroform or assistant, I hastily separated the placenta, which was adherent to the fundus, before attempting to replace the uterus. Pushing my right hand through the vulva into the vagina, while steadying the tissues above the pubes with my left, I indented the fundus with the tips of my fingers, and maintained a constant, steady pressure in the direction of the axis of the pelvis. In about five minutes my efforts were rewarded with success. I kept my hand in the uterus for a few moments and satisfied myself that every portion had been fully restored, and the outlines of the organ distinctly perceptible through the abdominal walls.

I remained near my patient for an hour, but there were no further attempts at inversion. She had no other untoward symptom, and her recovery was rapid.

Remarks.—The peculiarities of my case were the absence of the general symptoms, such as shock, collapse, hemorrhage, failure of the pulse, etc. The physical signs alone were present. The traction I made upon the cord was but slight, and could not have been sufficient to cause the inversion.

In the Am. Jour. of Med. Sciences for July, 1856, Dr. F. W. Montgomery — then Professor of Midwifery in King and Queens' College of Physics — details a similar case, under the caption "Complete Inversion of the Uterus at the time of Labor, with remarkable absence of the ordinary symptoms of that accident."

Proceedings of Societies.

AMERICAN PUBLIC HEALTH ASSOCIATION.

Dr. H. B. Baker of Lansing, Michigan, has returned from New York city, where he went to attend the second annual meeting of the American Public Health Association, which convened in that city on Tuesday, Nov. 11, and continued four days.

The President of the Association is Dr. Stephen Smith, the Secretary Dr. Elisha Harris, both of New York. This Association includes the leading Sanitarians of the United States, and members were present from all parts of the Union. Dr. Baker introduced the following resolutions, which were adopted:

Resolved, That a committee be appointed to prepare a form for a law providing for the organization of a National Health Department, or proper central organization, having relations to the Government and to the people, relative to the interests of health and life, similar to those of the Department of Agriculture relative to the interests of Agriculture, or of the Bureau of Education relative to educational interests; and that this committee be instructed to co-operate with a similar committee or "section" of the American Medical Association, and when a plan for a law shall be perfected said committee be authorized to memorialize Congress for the enactment of such a law; and that the committee report whatever action may be taken to this Association at its next meeting.

Resolved, That in the appointment of this committee each State shall, so far as practicable, be represented by one member of this Association; and that Hon. Dorman B. Eaton of New York be Chairman, and that Elisha Harris, M. D., of New York, Secretary of this Association, be the Secretary of this Committee, the other members to be appointed by the President of the Association.

Many important papers were read and reports made. Among these was a presentation of the summary of evidence on the cholera as it has prevailed in the Mississippi valley during the present year, illustrated with maps and diagrams, which were explained by members of the Association from the infected regions. The topic of yellow fever was thoroughly discussed, and conclusive evidence was brought forward that by such powerful disinfectants as carbolic acid, the dreadful scourge could be kept in check. In New Orleans, when a district was found to be infected, the streets surrounding it were sprinkled with a solution of carbolic acid, and there was also a free use of this powerful disinfectant inside the house.

Among the prominent medical men present who made reports and read papers, were Edward Jarvis, Dorchester, Mass.; James E. Reeves, Wheeling, Va.; Nathan Allen, Lowell, Mass.; Gen. Francis Walker, Superintendent U. S. Census; Carl Pfeiffer, Secretary of the American Institute of Architects; Edwin M. Snow, Rhode Island; C. B. White, President of the State Board of Health of Louisiana; and many others.

Able addresses were delivered by Andrew White, President of Cornell University; F. A. P. Barnard, President of Columbia College; and John Ordronaux, LL. D., State Commissioner of Lunacy of New York.

The next annual meeting is to be held at Philadelphia, but there will probably be a meeting next spring, either in the South or West.—*State Republican, Michigan, Lansing, Nov. 21, 1873.*

PUBLIC HEALTH ASSOCIATION.

The annual meeting of the *American Public Health Association* was held in New York, last week. It was a highly successful meeting and the subjects discussed were of the utmost importance to every community, and especially to the inhabitants of cities. We find in the *New York Times* very full reports of the meetings, some account of which may interest our readers. Members of the Association and others interested, were present, including the Health Officers of the most of our principal cities from Bangor to New Orleans, throughout the West. The prevalence of cholera in the West and Southwest this year, seems to have excited a general interest in sanitary subjects in that region.

A large number of papers was presented and read, as many as twenty-five or thirty, besides a considerable number that were presented and not read. We have not space to give even a synopsis of the papers presented, but are glad to know that they will be published in a volume of Transactions of the Association. All of these papers were of interest, and some of them especially important. We can only give the titles of a few which should be widely distributed in every family.

A paper upon "The Power of the House-keeper over, and Responsibility for the Health of the Family," by Dr. Edward Jarvis, of Dorchester, Mass., presented in a clear and practical manner the idea that the health, comfort and happiness, and the capability for labor, of each member of the family, depend to a great extent upon the kind of food they eat and the manner in which it is prepared for the table. For this the housekeeper is chiefly responsible, and hence the absurdity as well as great danger and wrong of employing utterly ignorant, inexperienced and incompetent persons for the preparation of food and the care of children in families. Intelligent and wealthy persons use less caution in these mat-

ters in caring for their children and families, than they do in caring for their horses and other domestic animals.

Other interesting and valuable papers were: "A Report upon the Physical and Moral Causes of Bad Health in American Women," by Dr. James E. Reeves, of Wheeling, W. Va.; "A paper upon Atmospheric Electricity and Ozone, and their relations to Health and Disease," by George M. Beard, M. D., of New York; "Report upon the Sanitary Chemistry of Waters, and the practical methods of perfecting the Water Supply of Towns and Cities," by C. F. Chandler, M. D., LL. D., President of the New York Board of Health, and Professor of Chemistry, Columbia College; "Address upon the Scope of Sanitary Laws," by Hon. Dorman B. Eaton, of New York; "A paper upon Sanitary Organization in Villages and Rural Districts," by Ezra M. Hunt, M. D., of New Jersey; "Report on Disinfection and Disinfectants, based upon Actual Tests and the Analysis of the various Disinfectants in use," by Evelyne Waller, A. M. Inspector in Analytical Chemistry; and a "Report upon Areas of Administration and other points connected with General Health Laws and Local Ordinances," by Dr. Elisha Harris, of the Health Department of New York City.

The subject of cholera and yellow fever were of especial interest in the proceedings of the meeting, and numerous local reports were presented from the principal places in the west and southwest where those diseases have prevailed during the present year. An enormous amount of facts was thus brought before the meeting, many of the papers even going into details which became tedious. Of course there was no opportunity for a calm and careful examination of the mass of facts presented, and none was attempted. The programme of the meeting promised the "Conclusion on Cholera" and a plan of preventive measures, but none seem to have been offered.

We wish we could believe that the facts presented, were of character to justify the feeling that any conclusion in which all could join, would be found from their examination. It is evident that this was not the case; the fact to a great extent being presented, apparently, for the purpose of supporting a previously conceived opinion. Indeed, in many cases, when facts were utterly wanting, it was boldly taken for granted that they must exist, apparently because the theory required it to be so.

A marked example of this was seen upon the question of the origin of the cholera of the present year in New Orleans. A most careful and minute examination made in good faith by the health authorities of that city, could not find the slightest reason for the belief that cholera was introduced there from abroad. Not a vessel had arrived from any place where cholera existed, for a considerable period before the disease appeared in New Orleans; not a vessel had arrived with the slightest diarrhœal disease on board; the first victims of the disease were not sailors, and had no connection with any vessel. In fact, every particle of evidence, positive and negative, seemed to prove, and did prove, to the entire satisfaction of the health authorities, that the disease was not brought there by any vessel whatsoever. This statement was published and was reiterated at the meeting in New York in the most unequivocal manner, and yet there were persons who had not been in New Orleans at all, ready to assert and swear to the assertion, that the cholera was brought there by vessels from the Baltic Sea. Without one particle of evidence to support the assertion, they made it apparently because the necessities of their theories required it to be true. The faith and effrontery of such persons are something approaching the marvellous. Their faith and certainty of conviction seem to grow in exact ratio to the absolute want of evidence to support them. It is certain, that

by that character of mind no great truths will ever be established. Such persons were, however, few in the meeting, and we cannot but hope, and hope implies expectation, that a calm review of the facts will enable sanitarians to reach some important conclusions. One paper was presented to the Association, but was not read, by Prof. Pettenkofer, an eminent sanitarian of Munich, in Germany, which seemed to contain a modification of the extremes of the controverted views on the subject of cholera. It is thought by some that the views of Prof. Pettenkofer may prove to be satisfactory to many who are anxiously seeking for the truth upon this subject. We propose hereafter to give an abstract of this paper.

The Health Association was reorganized in a manner to greatly increase its efficiency; a large number of new members was elected, and it finally adjourned on Friday afternoon to meet in Philadelphia, on the second Tuesday in November, 1874. It is probable, however, that a semi-annual meeting will be held in the spring.

The opinion seemed to be general among the sanitarians in New York, that the cholera will prevail, epidemically, in this country next year. It was supposed that it will start anew again in the west and southwest, on the approach of spring, and that it will also come with vessels from Europe. It was stated by the health officer of New York, that three vessels have already arrived in that port this fall, with cholera on board, or which had the disease on the passage.—*Providence Journal*, Nov. 19, 1873.

HANCOCK COUNTY MEDICAL SOCIETY.

GREENFIELD, IND., Jan. 6.

In pursuance of a call previously issued by several physicians, to others in the county, there assembled this day in the I. O. O. F. Hall, in this place, the following

physicians of the county, viz.: Drs. S. A. Troy, J. G. Stuart, Hiram Duncan, S. T. Yancy, and T. K. Saunders, of Fortville; J. B. Sparks, H. J. Bogart, and G. T. Wrenick, of Charlottsville; M. M. Hess, of Cleveland; G. C. Eubank, of Philadelphia, and N. P. Howard, S. M. Martin, M. M. Adams, and E. I. Judkins, of Greenfield.

Dr. S. M. Martin briefly stated the object of the meeting to be, to form a permanent county Medical Society as auxiliary to the State Medical Society, and upon motion Dr. Yancy was made temporary President, and E. I. Judkins temporary Secretary.

After the usual preliminary arrangements of organization, constitution and by-laws were adopted, and a permanent organization effected. The following officers were elected, viz.: Drs. N. P. Howard, President; S. A. Troy, Vice President; E. I. Judkins, Secretary; M. M. Adams, Treasurer; J. B. Sparks, S. M. Martin, S. T. Yancy, Censors; J. G. Stewart, H. J. Bogart, M. M. Hess, Trustees.

Embodied in the constitution is the following article expressing the objects of the organization, viz.: To provide an organization through which the regular physicians of the county shall be united in one Professional Fraternity, for the better promotion of all measures adapted to the relief of suffering; the improvement of the health and the protection of the lives of the community, and for the mutual improvement, the advancement of medical knowledge, the elevation of professional character, the encouragement of professional intercourse, and the protection of professional interests.

The regular meetings are to be held in Greenfield on the first Tuesday of January, April, July, and October of each year, and as many intermediate meetings at other times and places as the society may from time to time appoint.

After the appointment of several committees, the

adoption of some resolutions for the completion of the organization, and requesting the *Hancock Democrat* and *Indiana Medical Journal* to publish a summary of to-day's proceedings, the Society adjourned to meet in Greenfield on the second Tuesday of February next, at one o'clock P. M.

E. I. JUDKINS, Secretary.

Reviews.

CLINICAL RESEARCHES ON ELECTRO-SURGERY, by A. D. Rockwell, A. M., M. D., Fellow of the New York Academy of Medicine, etc., and George M. Beard, M. D., Electro-Therapist to DeWitt Seminary. New York: Wm. Wood & Co., 27 Great Jones st. Cathcart & Cleland, Indianapolis.

Messrs. Rockwell and Beard have been known to the profession for some time as experimenters upon and expounders of, the subject of electro-therapeutics; perhaps the ablest advocates of *central* galvanization we have in this country. Whether all they imagine is ready to be proven, may be another question. In this little work they treat of the surgery of the subject—the law controlling and practical application of electrolysis—the advantage of which they claim to be: first, less hemorrhage; second, no scar; third, less pain; fourth, less formidable to appearance than the knife, etc.

Several cases are given in illustration, as to epithelioma; some success was attained; in scirrhus it was a failure. In skin diseases the virtue of central galvanization is claimed, by its action through the central nervous system upon the peripheral nutrition.

Certainly the whole subject of application of electricity in the various modes mentioned, is a subject of the most importance and greatest interest. Though it will not do *all*, it may do much more than we at present are aware of.

CLINICAL NOTES OF THE ELECTRA CAUTERY IN UTERINE SURGERY, by J. Byrne, M. D., M. R. C. S. E., Surgeon in Chief to St. Marys Hospital for Diseases of Women, Brooklyn, etc. Wm. Wood & Co., 27 Great Jones street, New York. Cathcart & Cleland, Indianapolis.

This is a revised reprint of articles first appearing in the *New York Medical Record*, 1872-73, and seems to be an admirable contribution upon the subject discussed.

A description of batteries, etc., appears first; that made by Charles T. Chester, 104 Center street, is given the preference. The cautery knife, speculum, etc., are figured and described, with the mode of action of the latter upon introduction. Several examples of epithelioma and cancer of the uterus are given, with effect of treatment. This book is of importance to the specialist, and an acquisition to scientific medicine.

A UNIVERSAL FORMULARY, Containing the method of preparing and administering aperients and other medicines. The whole adapted to physicians and pharmacutists, by R. Eaglesfield Griffith, M. D. Third edition carefully revised and enlarged, by John M. Muisch, M. D., Prof. of Materia Medica and Botany in the Philadelphia College of Pharmacy; with illustrations. H. C. Lea, publisher, Philadelphia. Cathcart & Cleland, Indianapolis.

This new edition of an old and well known work is much improved in arrangement and matter, and as thus improved we do not know but it is the best work of the kind before the profession. The old edition had many points to complain of; while we admire the smaller work of Ellis, we find various wants supplied in the present work.

THE SPHYMOGRAPH; its Physiological and Pathological indication. The Essay to which was awarded the Stevens' triennial prize by the College of Physicians and Surgeons, New York, April, 1873. By Edgar Holden, A. M., M. D. Lindsay & Blackistone, Philadelphia. Cathcart & Cleland, Indianapolis.

This is an exhaustive treatise upon the subject, with profuse illustrations, giving the mechanicism of the instrument, indication of the pulse, translation of tracings and indications afforded thereby; application in cures of

heart and nervous diseases, etc; investigation as to effect of certain medicine upon the pulse. The work is not only of high scientific, but great practical value.

RULES AND REGULATIONS of the Indianapolis Gas-Light and Coke Company, and Practical Guide to Gas Consumers, by H. Stacey, Engineer and Superintendent; Journal Co., 1874.

This little pamphlet, in the pages of which we imagine we see some of the "foot prints" or "finger marks" of our friend Dr. R. T. Brown, City Gas Inspector, contains much valuable information; such as should be widely distributed and known to gas consumers of the city. Behold! there is a mystery? the ways of the gas who shall find out? This pamphlet may not fully explain the mystery—for then it would lose its interest, perhaps profit; but it would lessen the curiosity by satisfying it in part. We laymen already think it strange that the meters are made to read so uniformly the same, whether gas be used or not; but we believe the authorized version of the matter—as coming from the Gas Company—is that the excess of pressure is where the little fox resides; this excess of pressure being connected in some way with faultily arranged gas pipes, and thus the "burden of blame" is cast from the Gas Company to the gas consumer, or at least to the honest gas plumber. We have become muddled over the subject, and kindly refer the anxious enquirer to the pamphlet above noticed, the meter boy and the Gas Inspector.

A CLINICAL MANUAL OF THE DISEASES OF THE EAR, by Lawrence Turnbull, M. D., Prof. to the Department of Diseases of the Eye and Ear, at Howard Hospital, of Philadelphia, etc., with a colored lithographic plate and over one hundred illustrations on wood. Bowen & Stewart, Indianapolis; Philadelphia: J. B. Lipencott & Co.

This is an enlarged edition of a work entitled "Nature, Cause and Treatment of Nervous Deafness," issued by Dr. Turnbull in 1863. It certainly is an exhaustive work upon the subject, embracing an anatomical descrip-

tion of the Ear and its functions; "Physiology of Hearing; Instruments to assist hearing; Classification of Diseases of the Ear; Method of Investigation, and Means of Diagnosis by the use of Artifice and Daylight; Foreign bodies in the Ear; Purpose of the external, middle and internal Ear." His chapter on the Physiology of hearing, is simple and beautiful; well expressed, and fully treated of. Such are the works Medical Science delight in.

A MANUAL OF PSYCHOLOGICAL MEDICINE; containing the Lunacy Laws—the Nosology—Etiology, Statistics, Description, Diagnosis, Pathology and Treatment of Insanity, with an Appendix of cases, by John Charles Bucknell, Lond.; F. R. S., F. R. C. P., Lord Chancellor's Visitor of Lunatics, and by Daniel Hack Tuke, M. D., Member of the Royal College of Physicians of London, etc. Third edition; revised, illustrated and much enlarged. Lindsey & Blackiston, Philadelphia; Cathcart & Cleland, Indianapolis.

The present edition of this old and well-known and reliable work not only sustains its reputation as authority, but adds thereto. Its former edition was the cleverest and most satisfactory treatise upon the subject of Psychological Medicine that existed; much has been added to it in the present.

The chapter on Cerebral Pathology, is supplied by Dr. T. Batty Turk; the remainder of the work is divided between Dr. Bucknell and Dr. Daniel Hack Tuke.

Dr. Bucknell's Classification of Insanity is among the best we have; his statistics are the fullest we find in any general work. The Somatie theory of Insanity is adopted to a greater extent than, in our humble judgment, it should be; not that we deny that the brain is always in a diseased condition where this mental trouble is found, but the dividing line is often so obscure that practically it is the *mind* deranged, with healthy brain; for we are one of those that agree, with some of the best Physiologists and Psychologists, that it may justly be considered possible to have abnormality of the mental faculties,

and still consider the organic trouble rather as a concomitant, or result.

THE STUDENT'S GUIDE TO SURGICAL ANATOMY; being a description of the most important Surgical Regions of the Human Body, and intended as an introduction to Operative Surgery; by Edward Bellamy, F. R. C. S., Associate of King's Cross Hospital, etc. H. C. Lea, Philadelphia; Cathcart & Cleland, Indianapolis.

The author, who is Lecturer on Surgical Anatomy at Charing Cross Hospital, has given us a neat and much needed work. The connecting link between Practical Descriptive Anatomy and Surgery has been too much neglected. Although its value has been recognized by the best surgeons in times past, it has generally been treated of either in connection with Descriptive Anatomy or Operative Surgery—somewhat similar to the mode in vogue with reference to Medical Jurisprudence dovetailed into almost any subject, and scarcely noticed at that. It is true we had before the profession Maclise's admirable Surgical Anatomy, with plates—a work all should have who can afford it—but still have needed a Text Book, and the present work supplies the want—with details full enough at a moderate price, no one need be without it. Many of the Illustrations will be recognized as the same as those found in Heath's Practical Anatomy, which, by the by, is an admirable Text Book, and a fit companion for the present work.

A CLINICAL HISTORY OF THE MEDICAL AND SURGICAL DISEASE OF WOMEN, by Robert Barnes, M. D. London: Fellow Lecturers at the Royal College of Physicians, etc., with 169 illustrations. H. C. Lea, Philadelphia. Cathcart & Cleland, Indianapolis.

This is certainly a work of neat execution, with numerous illustrations of various organs, their several pathological conditions, and instruments used in treating the diseased conditions described.

The author first takes up the descriptive and pathological relation of the female organs of generation; next,

the conditions indicating necessity for examination, with special symptoms, such as discharges, pain, vaginism, sterility, etc.; then a description of the numerous well recognized diseases, with distosias, etc.

He tells us in his preface that "physicians who neglect the study of pelvic diseases in women are constantly in danger of overlooking the efficient cause, or a serious complication of the more various diseases which they undertake to treat, they cannot possibly underestimate many of the disorders of the organs of assimilation, of respiration of circulation, and especially of the nervous system, without a careful investigation of the conditions of the reproductive organs." To this we heartily subscribe, and consider, with him, that "here lies the missing link in our chain of reasoning." At the same time we would not—nor do we presume the writer so intends to express himself—run everything into the "uterus," or indeed the "pelvis." 'Tis a little "smattering" that causes some to run to extremes in this as well as in other things. A more thorough knowledge gives one a chance to properly discriminate, and place to each organ only its proper share in the causation of diseased manifestations.

A PRACTICAL TREATISE ON THE DISEASE OF CHILDREN
by J. Forsyth Meigs, M. D., one of the Physicians to the Pennsylvania Hospital, etc., and William Pepper, M. D., Lecturer on Clinical Medicine in the University of Pennsylvania. Lindsey & Blackistone, Phil.; Cathcart & Cleland, Indianapolis.

This work, dedicated to the retired George B. Wood, M. D., L.L. D., is a fifth edition of a well known work. It includes not only the diseases peculiar to children, but also treats of such abnormal conditions found at any age, when they attach to childhood.

Seventeen new articles appear in this work, such as Diseases of the Throat, Cyanosis, diseases of the Cecum, Infantile Paralysis, Typhoid Fever, etc.

Although we have several good works on diseases of

children, among which we must mention that of Dr. Smith, still for fullness of detail and as an encyclopedia for reference, we cannot ignore the present. The practitioner cannot go amiss in giving it a place in his library.

THE PUERPERAL DISEASES—Clinical Lecturers delivered at Bellevue Hospital, by Fordyce Baker, M. D., Clinical Professor of Midwifery and Diseases of Women in the Bellevue Hospital Medical College, etc. New York; D. Appleton & Co., 549 and 551 Broadway. Cathcart & Cleland, Indianapolis.

The author's opinion of the grade of his chosen specialty is exhibited in the following quotations:

"At the present day, for the first time in the history of the world, the obstetrical department seems to be assuming its proper position, as the highest triumph of medicine, if its rank be graded by its importance to society, or by the intellectual culture and ability required, as compared with that demanded of the physician and surgeon. A man may become eminent as a physician, and yet know very little of obstetrics, or he may be a successful and distinguished surgeon, and be quite ignorant of even the rudiments of obstetrics. But no one can be a really able obstetrician unless he be both physician and surgeon."

Bold assertions truly. The latter clause we certainly think is true; as to the former we leave it to be answered by others.

The subjects discussed are "Puerperal Convulsions," "Diet of Puerperal Women," "Laceration of the Perineum," "Thrombus of the Vulva and Vagina," "Puerperal Albuminuria," "Puerperal Convulsions," "Lactations," "Metritis and Mammary Abscess," "Puerperal Nausea," "Relaxation of the Pelvic Symphyses," "Phlegmatia Dolens," "Puerperal Thrombosis and Embolism," "Puerperal Phlebitis," "Puerperal Metritis," "Puerperal Peritonitis," "Pelvis Peritonitis and Pelvis Cellulitis," "Puerperal Leptisemia and Pyemia," "Puer-

peral fever," and an Appendix relating to the statistics of that condition.

Not the least recommendation for this work, is the admirable manner in which the work is executed. Just the sized type to suit all eyes, and to cause one to love to read simply for the pleasure, produced by the agreeable impression upon the optic nerve. The form in which the matter is presented—that of lectures—is also a feature not to be ignored.

Editorial.

“BLOOD.”

“The blood is the life thereof,” so thought Moses, and it is as true, in the sense he applied it, now, as then; but in another, the common acceptation of the term, we are well convinced of its truth. We talk of blooded horses and cattle, and understand definitely the meaning thereof—’tis the make-up, and the organization. So of the human species. In this lies the germ of the diversity found among the various races and nationalities. When pure and unimpaired by any extraneous causes, their characteristics are distinct, and not liable to be confounded with another, but when mixed by emigration or immigration with their neighboring or distant “bloods,” gradually the distinctive traits are lost, as according to various surroundings and circumstances they either impress upon, or are impressed by those with whom they mix, a higher or lower degree of manhood, and thus they gradually, in the second or farther removed generation, assume the characteristics of a new order of men; or as has in some cases happened, one is entirely blotted out by the gradual or more sudden encroachment of the foreign element without the old contributing a single element to the new

order of things. As in the nations and races, so in communities, families, and individuals. As humiliating as it may be to many who hold their heads high as to wealth, position, learning, or polish of manners, it is nevertheless a fact that they, at no distant anterior date, can find, by tracing, their origin from the poor, the very humble, the illiterate and boorish. This is too patent to every one to need illustration.

To trace the sinuosities of the ancestral stream—to discern clearly its course, or describe the manner in which it emerged from the fog-covered marsh to a land beautiful and rich, would, if it were possible so to do, be foreign to our object, but if we look closely we can discern, without difficulty, one guiding element—an element without which all efforts toward progress would have been fruitless—if such an effort would ever have been made—and with which ten thousand difficulties could not prevent, and scarcely retard such effort. This is the “blood,” the fixed organization, both physical and mental, which, if present at all, will surely, *under favorable circumstances*, fight its way to the surface. Thus is stated a general fact, and our belief in it as a universal truism expressed.

An application of these general views to a special case may be found in viewing the history of the early inhabitation of our own State, especially its Southern half, as well as those of Southern Illinois. We deal with facts for their scientific as well as their practical advantages, and can but recognize as a truth that by far the larger number of those who composed the first settlers of all Indiana and Illinois south of the National road came from the Southern States; and also it is equally true that a lower order of intelligence—a marked degree of ignorance and an inaptitude for progress has been the characteristics of this portion of our citizens. We might trace back the history of the early emigrant and find definitely the causes of these traits that dis-

tinguishes them, but it is not necessary, for it has often been done before, and in a general sense it is well understood. The major influence of slavery would no doubt embrace all the minor causes, for in this we find the exclusion of educational means, as well, also, as the separation of the whites into two or more distinct classes—one the masters, the other the servants, or at least the inferiors of the blacks themselves, but on which ever side of this intermediate or slave element, ignorance is shown to be, in some degree, prevalent with all, except with a very small minority; and all, even the more favored few, have felt, or suffered from the taint, the influence has exerted an effect that is for the worse. With this ignorance, more notable, where the social status is lowest, is linked invariably a direct tendency to stagnation or retrogression.

As in a journey the traveler may emerge from a land of waving forests, beautiful fields, and gushing fountains, into a place of desolation, where no flowers spring to please the eye, no sound heard to break the monotony of silence, but all is an unvaried stillness, incapable of offering present enjoyment, or hope of future progress, so here naught but a black spot is seen, with its cancer-like prolongation reaching out, permeating and corrupting the whole body politic. With such a load to carry, with weakness on our part and gradual growth of the evil, it is no wonder that we have lagged far behind, and that sister States have out-stripped us in the race. The vast majority of those who came from such a source, nothing but death could change. They were beyond any educational means that could be maintained among them, and if it were not for the inherent vitality of Anglo-saxon "blood," worse and worse would have been the result, even as the generations passed, except as new and purer blood might be infused into them through the influence of inter-marriage with a more enlightened and better organized

race—and, indeed, in these two causes do we find the germ of *any* progress that may show itself in this class of our citizens, viz.: 1st. The latent germ that has been hid, but which may spring into new activity under the invigorating influence of education and contact with higher vitality; and 2d. the gradual production of a new race in consequence of inter-marriage. While we are a native born Hoosier, we can not, however, having facts before us, deny that the inhabitants of our native State, taking them collectively, rank lower for intelligence, and have made less progress than their members East or West, and by no means do they approach the distant East or Northwest. It is this incubus of bad descent or “blood” that, more than any thing else, has kept them back and down. Latent qualities of worth, many no doubt have, who yet for want of the chance, as though the influence of adverse circumstances would never, unaided, make any progress at all, and unless they were brought in contact with a more enlightened and energetic element, they would remain in the same condition as they were when they or their fathers sat foot in the State. Giving this contact as having presented to them these opportunities to make the most of themselves, we grant them that their inherent good common sense will develop to a certain degree, and make itself felt.

Only two means are known to us of dispelling this cloud that has over-shaded the State, both of which have been hinted at already. 1st. Through the influence of immigration, bearing with it a foreign element of energy, and gradually either rooting out and surplanting the present occupants, or as gradually impressing upon them something of their own nature; or, 2d, by a general educational system, bringing up the new and young generations, while the old is disposed of by death or removal.

All history teaches us the efficiency of the former method, and all experience demonstrates that the latter,

if only means are found to sustain it among the original inhabitants with sufficient force, and for a sufficient length of time, will produce great results. It is by both means that the Southern States are being, in some degree, relieved of the blight that has so long rested upon them, and it is by such means only that it will eventually be redeemed.

If, therefore, it is in this manner the Southern States are to be brought out of bondage, and light caused to shine where only darkness prevailed, the same modes of relief are the only one applicable to this, our own State. As to the manner in which such means are to be applied to render the effort more effectual, as well as arguments touching upon their paramount importance, we will speak in a subsequent number.

THE SPHYGMOMETER

Is the name of a new instrument for examining the pulse, and is the invention of J. W. Hervey, M. D., of this city, late of Oaklanden. We cannot convey a definite idea of the construction, use and mode of application of this instrument, without the use of diagrams, which we have not at hand at this time.

The *Sphygmometer* consists of a light metallic case, weighing something over one pound, and can be made to carry in the pocket. It is about five inches high, two and one-half inches wide in the center, with two lateral wings, each two and one-half inches in length. These wings widen from the center, and are circular at the terminus, which is three inches wide. From the center of the axis rises a small platform or elevation, upon which the arm plate rests. From the arm plate rises a delicate hinge, so constructed that it slips down beside the radial artery. To this hinge is hung the pulse plate, beneath

which is attached a wire which passes down, and works in an eyelet in another level, which is attached to a pivot. This pivot stands at an angle of forty-five degrees, and to it is attached two arms, one for each wing of the instrument. There is also attached to this pivot or axle, a wire, which passes down to that part of the instrument that supports and moves the paper; to this wire is attached the pen, and upon this one pivot is hung all the pulse movements. The apparatus for moving the paper consists of two rotary cylinders; upon the top of one of these is a two-wheeled roller, made to pass or roll on top of the paper, so as to shove the strip along with any speed the operator may desire. Its pressure is regulated by two coil-springs, and its motion by a small wheel turned by the operator. To one arm of the instrument is attached a weight box or pan, by which the force of the pulse can be weighed, and the pressure upon the artery regulated. To the other arm is attached a hand which moves along a scale marked on the upper surface of one wing of the instrument. By this contrivance we can measure the size of the pulse, and study the motions of the heart and arteries.

To use the instrument, requires but a moment's preparation. If you wish to weigh or trace the pulse, place the instrument upon anything solid, having your strip of paper for the tracings ready; place a pledget of lint or cotton or wool saturated with ink in the pan, which is funnel-shaped at the top. Then place the wrist, with the palm of the hand down, on the arm plate; shove the hinge down on the outside of the radial artery; then turn the arm inward till the artery rests upon the pulse-plate; regulate the pressure by weights upon the weight-box. Then you are ready to weigh or trace the pulse as perfectly as was ever done by *sphygmography*. If you wish to study the pulse without the tracings, the whole of that attachment can be slipped off in a second. You can then study and inspect the heart's motion, and the elas-

ticity of the arteries to the fullest extent; at the same time your patient is at ease, unembarrassed and unincumbered by bandages, spring clock-work and attendants.

For further information with reference to the *Sphygmometer*, address J. W. Hervey, this city, who is preparing a short and concise treatise on the use of his instrument, and its utility in the investigation and cure of disease.

THE American Medical Association meets the first Tuesday in June of this year, at Detroit, Mich.

THE Indiana State Medical Society meets the first Tuesday in May, at Indianapolis.

THE trichina spiralis has invaded Aurora, Ind., and several deaths have occurred in consequence. Dr. Sutton, with his characteristic zeal and energy, has investigated the subject as to the symptoms and causes of the disease as it occurred in the persons affected, and in the animal from whom it came. We expect a full report from the Doctor in a short time.

WE see our old friends, Lilly & Phelan, whose manufacturing establishment for Pharmaceutical preparations is in Evansville, in this State, have established their headquarters in New York, 58 Cedar street, where they intend to make a specialty of their famous aromatic liquid pepsin. It is gratifying to know that a preparation of intrinsic value that this house has, is being tested by the profession, and is winning favor wherever tried. It is certainly one of the best preparations of pepsin we have used.

Miscellaneous.

A NEW BLOODLESS OPERATION.

The bloodless method of operation appears to have become quite fashionable of late, and surgeons are endeavoring

oring to extend it to every region of the body. Quite recently, a new application of an old principle has been introduced into England from Vienna by Sir Henry Thompson—namely, the plan of removing tumors by gradual strangulation. It appears that when Sir Henry was in Vienna a few weeks ago he had many opportunities of seeing the practice of Professor Dittle, who has lately been performing gradual strangulation operations. By this means Professor Dittle has removed tumors of all kinds, the testicles, the mamma, and even amputated the thigh. The details of action may best be given by describing the operation performed by Sir Henry Thompson at University College Hospital on the 21st inst. for the removal of a diseased breast:—

A piece of india-rubber cord about the size of a No. 4 catheter is passed through the eye of a large curved needle set in a handle. Through the same eye a stout piece of whipcord is passed. The breast is then gently drawn from the subjacent tissues, and the needle carrying the india-rubber and the whipcord ligature is made to transfix the base. When the point of the needle has emerged, the india-rubber band is cut in two and the needle withdrawn, leaving the whipcord uncut. Each of the two india-rubber bands is now made to encircle half the mamma, and then tied tightly as in the operation for *nævus*. The operation which is quite bloodless, is now complete. The constant pressure of the india-rubber cord causes linear sloughing, and in nine or ten days the breast separates. It may be added that the whipcord is passed through with the india-rubber cord, as the latter sometimes break, even after two or three days as in the present instance. Sometimes only one side of the breast is tied at the primary operation, the other half being left until the first has been completely cut through. It will be observed that no cutaneous incision in the skin was made; but Sir Henry remarked that, although he wished to perform this peculiar operation exactly accor-

ding to the rule of Professor Dittle, he would in future prefer to make a slight groove in the skin in which the india-rubber ligature should lie.

Professor Dittle claims for his operation—which, he says, is especially adapted for fistula in ano—a great immunity from pyæmia, inasmuch as by the gradual ulcerative process smaller openings are left for the absorption of septic matter. But although it is perhaps premature to offer a decided opinion on the merits of the operation, it will at once be seen that the advantage thus gained is almost nullified by the presence of a large sloughing mass in contact with the vessels for many days, and in the larger operations even for weeks. Moreover, at least one case of pyæmia has followed this operation. Further, against the plan of dividing only half the breast or half a tumor at a time it may be urged that the chances of secondary hæmorrhage are increased by throwing the full force of the blood-current on to the vessels of the unligated side, so that the blood may escape from the distal surface of the separation.

It may be interesting to our readers to be informed as to the incident which Professor Dittle asserts led him to think of the applicability of this operation for the removal of tumors. It seems that some months ago he was called to see a young girl who was suffering from severe nervous symptoms, and who was evidently dying. Next day, on making a post-mortem examination, he found that the rubber band of a hair-net which had been worn day and night for a month was deeply imbedded in the pericranial tissues, and had in one part cut through the walls of the skull and was pressing on the dura mater, which was in a state of acute inflammation. On inquiry it was ascertained that the girl had a cruel step-mother, who greatly objected to the loose and disheveled locks of her daughter, and insisted therefore, on the child wearing a net to keep the hair in place, with what effect our readers already know.

Mr. John Eric Erichsen, writes to the London *Medical Times and Gazette* :

This method of operating is by no means new, either in principle or detail. I saw it practiced by Mr. Clover more than twenty years ago, in all respects as now done, except that he used a tourniquet without a pad instead of the vulcanized tube ; and I have for many years past, certainly in and since the edition 1864, mentioned it as a matter of common professional knowledge in the "Science and Art of Surgery." Esmarch can lay no serious claim to being the originator of the method. He has the merit of having extended its application to other cases than amputations of the limbs. The tight bandage is as unnecessary as it may be injurious. The Edinburgh plan of securing bloodlessness in amputations, viz., by simply raising the limb perpendicularly for a few minutes, stroking it gently with the hand from below upwards, and then very quickly and very tightly screwing up the tourniquet band, is perfect, and does away with the danger of compressing inflamed and infiltrated parts by the application of a tight roller applied upwards.

The use of Dittle's elastic ligature appears to me to be simply a return to mediæval barbarism, with the aid of modern appliances. What I have seen of it in practice would certainly not encourage me to have recourse to it for the strangulation of the fetid necrosis, and slow separation of tumors.—*London Lancet*.

BREAD TESTS² AND ADULTERATION.—Experience has everywhere shown (says the writer in the *Sanitarian*) that bread made from the cereal grains contains more of the essentials necessary to the support of adult human life than any other article of food. To the cereal grains may be added buckwheat, which, although belonging to a different family of plants, is nevertheless in its composition analogous to the cereal grains. Bread is made either by fermentation, or by forcing in carbonic

acid gas, or by forming carbonic acid gas in the substance of dough which consists of flour mingled with water. In the manufacture of ordinary fermented bread, alum is added, ostensibly to prevent excessive fermentation, but this salt also possesses the quality of incorporating an excess of water and increasing the weight of the loaf. In making bread by this process the proportions are 20 lbs. of flour, 8 to 12 lbs. of warm water, 4 ozs. of yeast, a little mashed potato, and $1\frac{1}{2}$ to 2 ozs. of salt. $6\frac{1}{2}$ lbs. of dough should yield 6 lbs. of bread. Carbonic acid is also disengaged by mixing soda and cream of tartar with the dough, or by the use of baking powders, which are compounds of the salts of sodium and ammonium, and tartaric, phosphoric, and citric acids. Aerated bread is made by forcing carbonic acid through the dough by means of pressure. A barrel of flour will make from 63 to 73 good 4-lb. loaves of bread. Good bread only contains 33 per cent. of water; all over this proportion is in excess. *Cæteris paribus*, the greater the amount of gluten in flour the more valuable it is, as it is easy of digestion and highly nutritious.

The *Appreciateur* of M. Robine is based upon the property of dilute acetic acid of dissolving out the gluten or albuminous matter in flour, without affecting the other constituents. The density of the solution is the measure of the richness of the flour in gluten.

Variations in the quality of the gluten may be due to the admixture of corn-meal, rye flour, barley flour oatmeal, peameal, bean-meal, buckwheat-meal, potato-starch, and rice flour. The chief adulterations are the various compounds of lime, as marble dust, plaster of Paris, chalk, bone-dust, alabaster dust, mineral white m, alum, pipeclay, soapstone, and sulphate of copper.—*Sanitarian*, No. 4, 1873.

IS SULPHATE OF MORPHIA INCOMPATIBLE WITH COMPOUND SPIRIT OF ETHER.—A short time ago I prepared the fol-

lowing prescription: Sulphate of morphia, 3 grains, Compound spirit of ether, 2 ounces, Mix. Dose a teaspoonfull at night.

About two weeks afterwards the bottle returned, the person saying they had no further use for it, as the doctor had prescribed a different medicine in place of it. There was about a quarter of an ounce of liquid left in the vial, and I noticed it was full of small crystals. These being tested, with nitric acid, gave the reaction of morphia, while the liquid gave no reaction at all. Thinking the ether present in the compound had something to do with the occurrence, I made a solution of sulphate of morphia in alcohol, and kept it two days without any change intervening, when, a small quantity of ether being added, the whole of the sulphate of morphia crystallized out in the space of 24 hours, the liquid showing no reaction of morphia. Had the patient taken the last dose, with all the crystals in it, the result would have been quite serious. Has this prescription ever been noticed before? In case of accident, who would have been to blame?

“REACTION.”

New York, January, 1874.

[Although the reaction may not be generally known, we believe it has already been noticed before. “REACTION” is to be praised for having experimented himself and found a solution of the difficulty, instead of rushing to THE DRUGGISTS’ CIRCULAR, as many do, like children to their mother, asking for an explanation they could easily discover if they would only use their own eyes and their own hands. As to the question: “Who would be to blame?” we think we would rather leave the answer to the coroner’s jury—when the case happens.]—*Druggists’ Circular and Chemical Gazette.*

GREASE ERASER.—The following will be found a most excellent preparation for removing grease-spots from clothing:

Benzine, Alcohol, Ether, of each equal parts. Apply with a sponge, lay a sheet of tissue-paper on the garment, and dry with a hot iron. It does the work effectually, without the slightest injury to the most delicate fabric. It seems to be a perfect imitation of an article called "*Etheriolene*."—*Druggists' Circular and Chemical Gazette*.

CASE OF ACARDIA.—By William T. Lusk, M. D., of New York.

During the month of October, my friend, Dr. G. A. Wyeth, of this city, called on me, at about seven o'clock in the evening, to see a case of confinement with him. His patient, who was a primipara eighteen years of age, had already given birth to a male child weighing two pounds five ounces. As, however, the abdomen had not greatly diminished in size since the delivery, it was fair to presume that a twin pregnancy existed. Such, indeed, proved to be the case. On my arrival I ruptured the membranes, which I found protruding from the largely-dilated os. After the rupture I recognized the feet of a child, and felt likewise, a soft mass presenting, at first I took for the breech. The uterine pains, aided by the tractions of Dr. Wyeth was now enabled to make, sufficed in the course of an hour for the completion of the delivery.

It was at once recognized as an acardia. It should be here stated that the mother reckoned herself to have been seven months advanced in pregnancy. Sixteen hours elapsed from the beginning of labor to the birth of the first child, and thirteen hours subsequently elapsed before the delivery of the acardia.

The weight of the monstrosity was three pounds and nine ounces. the lower extremities, as far as the feet, were well developed. There were but two toes on the right foot. On the left foot there were two toes completely formed, and a small appendix composed of skin,

which was evidently the rudiment of a third toe. Each foot had three tarsal and three metatarsal bones. The skin and underlying connective tissue was œdematous, and the muscles complete, but so pale, and so closely adherent to the connective tissue, that their preparation required a great deal of care. Scrotum and penis were well developed. A loop of intestine protruded from the umbilicus. The cord did not exceed a goose-quill in diameter. The upper portion of the fœtus consisted of two globular sacs, composed of skin, which was greatly hypertrophied, and through which a distinct fluctuation could be made out. There was a small bunch of hair situated just at the upper junction of the sacs.

Upon opening the tumor, it was found to be filled with gelatinous matter, partly free, and partly contained in cysts. In the anterior portion were situated the vestiges of the trunk. The cervical, dorsal and lumbar vertebræ, and ribs, were complete. There was a pyramidal bit of bone loosely connected with the upper cervical dorsal vertebra, which constituted the sole representative of the skull. As usual, there was complete absence of the sternum. The kidneys were well developed; the right kidney, owing to the absence of the liver, was situated somewhat higher than the left. The ureters were both present, and opened into a small-sized bladder. A single artery and vein were situated over the vertebral column. Two bodies supposed to be the testicles, were found near the internal abdominal ring. There were no traces to be found of either heart, lungs, stomach, pancreas, liver or spleen. The intestine, which was about two inches long, protruded, as we have seen, from the umbilicus.

The communication between the two umbilical veins was situated just at the insertions of the two cords into the placenta. A thrombus had formed in the communicating branch, which nearly closed the umbilical vein coming from the acardia, while the circulation in the

umbilical vein of the well-formed child was undisturbed. A communication between the umbilical arteries was not detected, though doubtless present.

The accepted theory of the origin of this monstrosity may be briefly stated as follows: The acardia is always one of twins. Both children are developed from the same ovium; are of the same sex, and are contained in a single chorion. There is a single placenta, but two capillary systems, which communicate. Sometimes it happens that, by means of large communicating vessels, the two fœtal circulations in the placenta form a more intimate union with one another. Then, in case each fœtal heart beats with equal intensity, the result would be an arrest of the circulation in the communicating branches, with formation of thrombus. When the heart's action in one fœtus counterbalances that of the other, the stronger bloodcurrent in the placenta would push back the weaker one, at first impeding the circulation of the less favored fœtus, then arresting it, and finally causing it to take an inverse direction. The heart then atrophies. The acardia becomes simply an appendage to the healthy fœtus, the circulation going on as follows: Venous blood from the healthy fœtus is conveyed by the umbilical arteries to the placenta. The force of the healthy fœtus's heart then carries it through the communicating branches to the umbilical arteries of the less favored twin. This force, however, is sufficient to carry the current to the upper parts of the body, which therefore are not developed. The favorable position of the lower extremities for receiving the blood from the umbilical and the pelvic organs explains their future though imperfect growth and development. The blood carried to the fœtus by the umbilical arteries is returned by the umbilical vein. The mother made a good recovery.—*New York Medical Journal*.

THE ATOMIC THEORY.—An able article in the *Saturday Review* presents the reckless assumption of finality by

the atomic theory in forcible argument, as follows: "The point in dispute is, whether the hypothesis of truth of the atomic theory is necessary to explain chemical phenomena, and whether it is sufficient to explain the phenomena of physics. And here evidence is sadly against the theory. The chemist must remember that his methods of analysis are no longer the subtlest that we have. The spectroscope and the polariscope tell us of structure and heterogeneity where the chemist finds only uniformity. He would have us believe that iron is nothing but an agglomeration of like atoms without definite arrangement. In however small quantities it be, its properties are the same; no combinations into which it enters suggest the idea that it has been resolved into component elements, so that he would have us believe that it is composed of uniform atoms, like and indivisible. But the spectroscope tells us a different tale. It shows us that these pretended atoms, when heated sufficiently, send off scores of different kinds of light, each kind perfectly definite and separately recognizable; and as we know that each of these must have a different rate of vibration, which again must have been excited by a source having a like rate of vibration, we see at once that this would-be atom is a wondrously complex system."—*Medical and Surgical Reporter*.

THE SIAMESE TWINS.—The examination of the bodies was conducted at the College of Physicians, February 18th, by Drs. Pancoast and Allen. They were pronounced to belong to that species of monstrosities technically called *Omphelopus Xiphodidymus*,

The band which united them was four inches long and eight inches in circumference. Processes of the peritoneum ran up to the median line of this band, but there was a complete separation of the peritoneal cavities at this line. The hypogastric arteries under the anterior walls of the abdomen distributed branches from each body into the band. The ensiform appendices of

the sternum were united in the median line by a continuity of cartilaginous structure, but not by any true articulation. A vascular connection between the two bodies was demonstrated by injecting colored plaster into the portal circulation of Chang, which appeared in the portal circulation of Eng. The track of this injection passed beneath the peritoneal prolongation of Chang, and above that of Eng; and although little parenchymatous structure was present, no reasonable doubt existed but that the communication between the two circulatory system was free. Doubtless the peritoneal pouches referred to contained, when in the foetal condition, true liver tissue, which, in process of growth, diminished and retracted, so as to leave the pouches empty.

The physical condition of the twins was contrasted. Eng was well nourished, while Chang was emaciated. It was the opinion of Dr. Allen that Chang died of cerebral clot, and Eng probably of freight.

The band itself was composed of interlacing muscular and aponeurotic fibres passing across the median line and inserted into the ensiform cartilage of the opposite twin.

Such is a brief description of the nature of the connecting band of the twins. It shows that while a separation in life would not have been necessarily fatal, it would have been extremely perilous, and they did wisely in refusing to submit to it.—*Medical and Surgical Reporter*.

ACTION OF THE MORAL ON THE PHYSICAL NATURE—Under this title Dr. Cornette (*Annales Medico-Psychologiques*, March, 1873) gives two very interesting cases, in which entire loss of hair, with change of voice, resulted from depressing emotions.

The first case was that of a perfectly healthy gardner, forty-five years of age, who after undergoing considerable mental disquietude, through fear of impending pov-

erty, for several weeks, found his hair suddenly growing white and at the same time falling out.

In a few days his head became almost completely bald, the few hairs which still remained in the form of a circle around the temples and occiput being strait, fine, sparsely scattered, and white as snow. His hair had previously been curly, abundant, and quite black. His beard rapidly became affected in a similar manner, and later the hair had entirely disappeared from all parts of the body.

At the same time, his voice, which before had been strong and full, became quite feeble and low in tone, and his whole appearance was that of a man of seventy-five. His health, however, was perfectly good.

Five years later his condition was nearly the same. He was quite melancholly, and but a few hairs, of a downy nature, remained on his body. His voice was still feeble.

The other case was that of a gentleman, fifty-six years of age, in political life, and much harrassed by public and domestic anxieties.

One morning on awakening he found a large quantity of hair in his night-cap, and, running his hand through that which remained on his head, it came out by handfuls.

Within a short time he had lost not only all the hair on his scalp, but also that on the chin, and, finally, on all parts of the body.

After six years this gentleman's condition remained the same. His skin had returned to the smoothness of infancy; one would never believe it had been otherwise.

His general health remained good, but, like the previous case, his voice was nearly lost at first and even after several years was still quite feeble.—*The Druggist's Circular and Chemical Gazette.*

TO INCREASE THE ADHESIVENESS OF GUM ARABIC.—Concentrated solutions of gum arabic as a mucilage possesses the disagreeable property, when spread upon printing or other paper not strongly sized, to penetrate them to transparency, and in spite of this not making them adhere to other paper. Paper cannot be attached to common pasteboard, nor wood to wood. Paper pasted with mucilage on metallic surfaces usually falls off soon. The use of gum as cement for glass, porcelain, or earthenware, etc., is entirely impossible.

All these disadvantages of mucilage are remedied, when an aqueous solution of sulphate of aluminum is added. For 250 grammes of the concentrated gum solution (prepared with 2 parts of gum and 5 of water), two grammes of cryst. aluminum sulphate will suffice. This salt is dissolved in ten times its quantity of water, and mixed directly with the mucilage, which in this condition truly deserves the name of *vegetable glue*. Solution of alum serves the same purpose, but far less efficiently.—*Druggists' Circular and Chemical Gazette*.

REACTIONS OF ALKALOIDS WITH SUGAR AND SULPHURIC ACID.—If a minute quantity of morphia be mixed with six or eight times its weight of sugar, and a drop of concentrated sulphuric acid be added, the mixture becomes at once purplish red, and within half an hour passes, through the violet-blue and dirty blue-green, into dirty yellow. Water added to the purple solution destroys its color rapidly. One one-thousandth of a grain gives an intense reaction. Codeia behaves in a similar manner; the others, opium and the cinchona alkaloids, as well as strychnia and brucia, show no characteristic reaction, but, like pure sugar, merely give a brown color, except quinia, which gives a greenish-yellow coloration and a more intense fluorescence. Morphia gives its characteristic coloration, however, in presence of quinia. Aconitia, with sugar solution and strong sulphuric acid, gives a rose-red coloration on the margin, changing rapidly to

dirty violet and brown.—*Gleanings, in American Journal of Pharmacy.*

IMPROVED TESTS FOR SACCHARINE URINE.—Dr. Seegen's modification of Trommer's test consists in the preliminary filtration of urine through animal charcoal. This removes the uric acid and other matters which interfere with the action of Trommer's test, and leaves a colorless fluid, which is highly sensitive to the test. It is a delicate qualitative, but not a quantitative method.—*British Medical Journal.*

ADHESIVE PLASTER.—According to Otto Facilides, adhesive plaster, which has become brittle by age, and has lost its adhesive qualities, may be rendered adhesive again by coating it with oil of turpentine, by means of a sponge, and leaving it exposed for a day.—*Druggists' Circular and Chemical Gazette.*

POISONOUS ANILINE DYES.—Mr. William Ward, of Cleveland, Ohio, writes to the *Scientific American* as follows: "I recently ate about three inches of stick candy, of a red color, and was taken sick with a burning pain in the stomach and upper intestines. I grew worse, and in three days I was not able to walk without being faint and giddy, and had much pain all the time. A doctor prescribed for a case of aniline poisoning, and three doses of medicine put me out of danger. I am now about well again." Journals that deny the possibility of poisoning from the small amount of aniline dye used in coloring candies will "please copy."—*Boston Journal of Chemistry.*

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WHAT IS WANTING.

*Valedictory Address Before the Graduating Class, Indiana
Medical College February 27th, 1874.*

BY PROF. H. W. WILEY, M. D.

It is a source of no little consolation to one who has wrought constantly at a task to the end, to retrospect his work. It is a scriptural advice not to look back from the plough, but after the plough has been put away in the tool-shed, a sly peep from the barnyard is not to be deemed unscriptural.

The personal satisfaction with which this review is made, is a measure of the faithfulness with which the work has been done.

There is no pleasure in it for the sloven, no enjoyment for the lazy, no delight for the unsuccessful. But for him who has been earnest, industrious, and, as the world goes, successful, the pleasure of a retrospect is not unmingled.

He sees that his work, nominally done, is still incomplete. It is full of imperfections and disfigured by blem-

ishes. There are a thousand things he sees, which might have been better done or left undone. Thus, while he feels that something has been accomplished, he knows that there are many things still unaccomplished, and so far from resting contented with what he has done, he receives new impulses to do greater things, or to help others doing what he has done, to do it better. If our reviews do not engender some such feelings as these, but on the contrary, emotions of pride and self complacency, leading to a cessation of effort and placing a bar to progress, they were better left undone.

Thus, gentlemen, while on behalf of the faculty, I congratulate you to night on the completion of a stage of your journey, and while in common with you, I look back on the hard winter's work just closed so favorably, with, I hope, a reasonable degree of satisfaction, still I must say, even at the risk of cooling the enthusiasm of the occasion, that I am sorry that this resting place to which you have come to halt for the night, is not further along, and that the degrees which you now receive, do not represent a more extended knowledge and a more thorough culture. As you very well know, commencement occasions are usually seasons of *gushing*, in which fulsome praise is mingled with senseless boasting, and sickly compliments are interchanged upon the gigantic scale of Indianapolis real estate. The students are expected to regard the faculty as devoted, eminently capable, without superiors and with few equals in the land, while on the other hand the faculty regard the graduates as being of more than ordinary promise, moral and industrious. It is indeed a remarkable fact that from time immemorial every faculty of every college, has regarded and openly proclaimed every class the *best* that ever left the college halls. If this be true, gentlemen, and far be it from me to deny it, think to what an eminent degree of perfection you have arrived to night, or with what a paucity of knowledge the earlier classes have left these halls!

But let us not deceive ourselves with vain boastings. I do not believe by any means that the faculty from which you have received your instructions is the best in the world, nor do I believe that you believe it; nor that the students they have instructed are such superior beings. I certainly do believe, however, that it is the best faculty and the finest body of students in the State.

You have doubtless gathered already from the preceeding, the question which I desire to present, and, if possible, enforce in this the last lesson which you are to directly receive from the faculty.

It is this, 'what is lacking in our present system of Medical Education'?

In answer I would say first, a *thorough elementary education*. Let me speak plainly to night, for earnest speaking in the proper spirit need offend no one. We need not shut our eyes to the fact that many students bring with them to the study of medicine an imperfect English education. I know it is true that a doctor's medicine may agree with his patients, even when his verbs do not agree with nouns. The only possible case in which I can conceive of a doctor's ignorance benefitting a patient is where it would consist in a complete forgetfulness of the *materia medica*.

I insist that before entering a medical college, a student should prove by a rigid examination that he is proficient in what are known as the English branches.

Every young man in the country should know how to write and speak the English language correctly, to cipher as far as the rule of three, bound his own State, locate Bunker Hill, and give the date of the Declaration of Independence.

I would not have a student who says, 'have went,' debared from graduation no more than I would have a professor who says, 'I done it,' excluded from the facul-

ty, but I would like for both to be able to correct their language upon a second thought, and give the reasons therefor.

As the matter stands now we have no means of ascertaining what has been your preliminary training. We do not know, gentlemen, that you are able to read, and from an inspection of the matriculation book, we are quite certain that very few of you can write. There is no longer any excuse in this country to the young man presenting himself for admission to the study of medicine, for ignorance of these elementary branches.

There may be yet rare cases where a boy may not have the advantage of a common school education, or where incompetent teaching has made his school days a detriment to his real progress, but they are not common enough to merit any special provision in professional education. The young man who has grit enough to make a good doctor, will also have ambition enough even though he be poor and growing old, to make a good English scholar of himself.

The college which would refuse him admission until he had done this, would not work him an injury, but on the other hand confer upon him the greatest possible benefit. There is a growing tendency among medical students, and this fostered in part, by their teachers, to seek only the directly practical, the things they can use at the bedside. The young student should remember that there are many things necessary to qualify him to use properly the simplest things. Often thus it happens that the physician can do more with his words than with his pill and powder wisdom, more by his knowledge of mental modes than by his sedatives.

In cases of this kind we may see the golden fruit of words fitly spoken, where a mastery of English and a perception of feelings will work such wonders as the whole pharmacopia would never be able to perform. But it may be asked, would not a medical college in es-

tablishing preliminary examinations of this kind be erecting barriers aganst a phantom? To which I answer, that without doubt the greater number of those who now annually apply for admission to lectures are already able to pass their examination. Nevertheless, there are always a few who are deplorably and wickedly ignorant. The profession should protect itself against these pretenders. Though they may graduate and afterwards locate in the best cultivated communities, yet they will always find some who will guage them according to their true worth. Thus the profession through its unworthy representatives will be brought into disrespect, and fail to perform its real promises to society.

Gentlemen, I do not speak to wound the feelings of any one, especially on such an occasion I would avoid carefully anything of the kind. But I would speak plainly, earnestly, and I believe, truthfully. And thus I say, not unadvisedly, that had these preliminary tests been applied last fall when the crowds of medical students flocked from offices and active practice, to find place in the lecture rooms, there are few colleges in the land that had not suffered in the number of students, and not a few diplomas which this spring go forth had been withheld. And who will deny that it were not better that such should have been the case?

But let us seek a little further and see what is the second thing lacking in our present system. That any thing more than a rigid English examination should be required for a medical school, I will not now undertake to say, but surely if any other thing were to be required that undoubtedly should be at least an elementary knowledge of the Latin language. Let it, however, be granted in the first place that the argument based on the practical utility of the Latin language, is not as strong to day as it has been in earlier times. Long since the practice of writing all learned and scientific treatises in Latin has been abandoned for the double reason that for

the most part, learned men are not now able to write good Latin, nor would their learned readers be quite able to translate it freely when written. Nevertheless, the science of medicine still bears unmistakable traces of the Latin mould in which it was cast for so many centuries, nor is it quite certain, nor altogether desirable that these be wholly removed. Especially is this seen in the names of medicines and the formularies for their separate or combined exhibition. The mistakes which the doctor ignorant of Latin makes in reading and writing prescriptions, are often extremely ludicrous when they do not prove fatal, and these perhaps reached the acme of ridiculousness in the case of him who wishing mercury and chalk, asked the druggist for "Hydrog cum critter." I grant that ignorant pretenders often make a great flourish of a very little learning and flout in the faces of the apothecaries sesquipedalian prescriptions which seem to have emanated from the ghost of Galen himself, but which on closer inspection suggest, if the suspicion of their origin prove true, that the shades of Pluto have sadly adulterated the purity of the Latin literature.

In general, I would say that the habit of writing Latin prescriptions, even by a master of the language in English speaking countries, is reprehensible and serves oftener to bother the druggist and exhibit the learning of the doctor, than to benefit the patient. But some times a little Latin may save a great deal of useless or harmful medicines, as in the case of the physician who being importuned to administer a remedy to a patient who needed rather a flagellation than a physic, wrote an order on the druggist for *Saccharum et aquum destillatum*, a teaspoonful to be taken in a half pint of water three times a day.

The patient is said to have rapidly recovered and to have esteemed the remedy the most valuable in the world.

The knowledge of Latin, in as far as it concerns the

student practically, need not be complete. Three months with a good instructor would enable him to get along without much trouble. He should be able to distinguish declensions of nouns, numbers and cases, and thoroughly comprehend the syntax of adjectives. The only verbs he need to learn are *Recipio*, *fio*, *summo*, and the like. These points well learned will enable the average student to surmount intelligently all the Latin obstacles in his path.

Nothing will, however, be gained by haste in these matters. For the present we would perhaps do well enough to require only the English examinations, making the Latin examinations elective, admitting to advanced standing in Chemistry and Materia Medica those students who successfully pass them.

Those of you, gentlemen, who have studied Latin will readily admit the truth of the foregoing, and all of you I trust, will admit its pertinence.

You know our schools do not distinguish between students in regard to their entrance qualifications. The young man fresh from college, where perchance he has attained the highest honors of the course, and the unlettered youth from the plough, equally as honest and earnest, and equally endowed with natural talent, but in every other respect at a vast disadvantage, are placed upon the same footing. This is manifestly unjust to both, and frequently results in bitterness of feeling, and misguided rivalry.

Gentlemen, all of this will be remedied if you will labor earnestly to raise the standard for admission to our college, or help to form a public opinion which will compel our students to make more extended preparatory studies.

Passing now from the consideration of preliminary matters, let us briefly notice some of the things wanting during the professional drill. And first and chief, time. Only three years altogether are required to be spent in

the study of medicine. This indeed would not be so much out of the way if it were all spent within the college walls.

But altogether the student is required to spend but ten months under the instruction of his professor; if he does more it is a free will offering. The other twenty-six months are spent in office study.

We all know how often this is a make believe. The physician is overrun with practice. Usually the student is a beneficiary. He pays no fees and the physician does not feel called upon to give him instruction. To be sure the doctor allows his student to use his books, and this is frequently the only way the dust of ages is kept off them.

And so he goes over the yellow pages, making it a point to read a hundred pages a day, conscientiously reading every word and running over every figure in the tables, and conscientiously at night forgetting all that he had learned during the day. It is true that the student learns something of the practical part of the practice of medicine, that is he makes his preceptor's fires, sweeps his office, curries his horse, and smokes his pipe in his absence.

Of course it is important to know these things, but would it not be better to learn them afterward? And so the student with the exception of these practical interruptions reads interminably, mixing his anatomy with thoughts of Eliza Jane, wondering if she will prove true until he has spread his shingle to the breeze; 'de-luded soul, he might know she would not,' interspersing his physiology with speculations on his pecuniary destiny, and visions of professor's fees, and landlady's bills torture his dreams.

And the would be student drifts on, often without direction, frequently without aid, and always without stimulus. I have no doubt but that residence in the office of a good physician for some time after graduation would

be immensely valuable to the young doctor, but before he attended lectures, it is even in favorable circumstances almost wasted time. We need, therefore, longer sessions in our colleges and more of them; three sessions of nine months each would give the average student ample time to perfect himself in a greater part of the theory, and much of the practice of his chosen profession.

It seems to me that we make doctors too easily, they come upon us like the spring floods. The fervent lectures of the professors melt the masses of snow in the medical mountains of the moon, and inundate the devoted valleys. But here the simile ceases, for the flood subsides, and often leave the valleys enriched, but our doctors endure the heats of summer, and the tide is as high in the idle midsummer as it is on the ides of March.

Think, gentlemen, what a little drop you are in the bucket. See that large company filing out of Chicago, filled with the idle vanity so characteristic of that town. See those groups of young doctors coming hitherward on the new bridge of St. Louis, debating whether they shall try fortune further or seek a watery grave. See that small army crowding out of porkopolis, thinking they have absorbed all the loose learning of the land, and Oh! appalling sight, those grand divisions of young doctors holding their last dress parade in the city of Brotherly Love, and in the over crowded halls of Gotham. Who shall deliver us from the mighty throng! If, therefore, we increase the length of the course, we will at least diminish the number who reach the goal, and these according to the doctrine of the 'survival of the fittest,' will be those best calculated to succeed in subsequent professional life. Let me here allude to the only possible objection that can be made to making the sessions of Medical Colleges longer and more numerous. The larger number of Medical Students are poor. I hope I do not misrepresent you, gentlemen. It requires great sacrifice on their part, with their limited means to bear

the expenses which fall upon them, in the present system of short terms. If the course of lectures be made ten months, and three courses required to graduate, great numbers of them would have to give up the contest.

Thus the profession being filled from the ranks of the rich would loose some of its finest talent. I grant the objection its maximim force. I acknowledge that the new system would bear hard upon the indigent, and that, other things being equal, the poor boy will develop a higher order of talent than the rich in the majority of cases. But why may not a young man, if he be able to struggle with poverty for two years, be able to keep up this fight for four or six? Surely the longer he fights the better able he will be to fight. In this country as a school teacher he can earn enough in four months of the year, to keep him at lectures the other six months of the year.

Thus in five years he would be able to accomplish the course, and be a hundred fold better prepared for his profession than he would have been with a superficial training. Neither he nor his patients will have lost anything by the delay, and at the end, he need not be more than twenty-eight or thirty years of age. But I grant also the extreme view of the case, that there will be a few who by a conjunction of unfavorable circumstances, will not be able to hold up so long a time. The burdens they carry will prove too heavy and they will sink beneath them.

But shall we sacrifice the interests of a great profession, and imperil the physical happiness of the whole race, for a few? Shall the whole profession be degraded or kept degraded, that it may be open to a few, be they never so competent and honest, who otherwise would not be able to find in it a place? Certainly not. As students we should be willing to study longer, that as physicians we may be able to rank higher. This indecent haste to begin has been the ruin of many a good and promising youth. It is the sin of America *par excellence*.

But let us see what are some of the things we should be able to accomplish by the introduction of this extended curriculum. In the first place, every branch that is now studied could be more thoroughly studied; instead of being skimmed over merely to pass an examination, the student's time could be given to the mastery of the underlying principles of Medical science, so that what is practical could be more clearly perceived and more intelligently applied. Physiology and Chemistry could be studied in well appointed laboratories instead of being heard as a mere patch work of lectures, which at the best are neither so good nor so accurate as the text book, and whose only excuse is found in the fact that they save the student the trouble of a little extra reading.

Materia Medica could be made to include the study of botany, and would also be made principally a laboratory study, where each student would at least learn enough of practical pharmacy to be able to demand of the druggist pure medicines, and to be able to detect any adulteration. But in the second place an extended curriculum would give time and place for the introduction of an entirely new department of study. The study of psychology, a department of medical science which has already received some attention in its pathological relations, but which in its entirety has never been made obligatory on medical students. It is hard to imagine any branch of medical science more worthy of study, and impossible to find one more utterly neglected. The systems of mental philosophy which has been so long taught in our colleges, are simply the opinions of their authors of their own self consciousness. They have not a shadow of scientific authority on which to rest, and while doubtless true in many respects, cannot be received as a guide. It is as if the physiologist would write upon digestion from the sensations he notices after a full meal; or as if he should endeavor to deduce the composition of the bile from the self consciousness of his liver. While

the results in either case might be extremely interesting, they would hardly be regarded as resting upon a scientific basis. In the works, however, of Hammond and Maudsley and Bain, we have a return to the scientific method, and we learn thus, that the only true study of the mind, has its beginning in the study of the brain itself; the organ of the mind, just as the study of the use of the liver, begins with a study of the construction of that organ. Hence, the physiology of the mind, or psychology rests firmly upon a thorough anatomical knowledge of the cerebral tissues, and their methods of distribution. Once before to-night, I have said that the physician could frequently accomplish more by words fitly spoken than by medicine, but the power to speak these words fitly must come largely from a knowledge of mental moods and tenses. No well informed person now doubts the wonderful influence of the mind upon the body; he may not be able to tell what may be the relation of the one to the other, how far they are merged, or how perfectly separated. Nevertheless, we have the fact of the intimate relation before us. As far as science leads us, we do not know the mind except as it acts through the brain. To the physician, therefore, psychology is purely a physiology of the brain. And because the brain is the supreme development of the body, because from its royal throne, it directs more or less the whole animal economy, because it is the best perfection of organized matter with which the physician can have anything to do, it should be to him the thing of first importance.

I do not think I can insist too strongly upon this point. Consider how large a share of sickness and physical suffering in the land are the results of unhealthy mental states. There is no myth in the story of broken bodies caused by mental anguish, and mental disquiet. Here and there daily men are falling; frequently the body may escape for the time, but thought is destroyed, the emotions unsettled, and the man once useful finds at last

a place in the hospital for the Insane. Here then is surely the great problem of the physician. How to get at the mental disorder, how to find in what part of the cerebral substance the lesion exists, and how when found to restore its proper constitution, and consequently its normal function. These are the most difficult, as they are the most important questions to which the intelligent physician is called to give his attention.

Do not think, gentlemen, that this is a hopeless task. Much has already been accomplished, in fact a great deal, in view of the fact that the medical education preparatory to the great work, has been practically neglected. We shall expect much greater results from the coming generation of practitioners, who we trust will ere long be trained especially for this work.

We regard, therefore, this lack of psychological instruction as the chief thing at present wanting in our professional education. It will be a part of your duty, gentlemen, to see that many years do not elapse before the want is abundantly supplied. We cannot depend upon outside influences. As I have before said, the mental philosophy of our colleges, even if every medical student could have it, is wholly unreliable and almost useless for our purpose. What we want is psychology in its relations to medicine, and this we can get only from our profession. And finally to night, allow me to mention that there is wanting in our system of medical education a broader and more liberal culture. The physician while he should give his best energies, and the most of his time to what pertains peculiarly to his profession, should nevertheless be a man of large culture and extended knowledge.

The physician from his peculiar relations to his people, is looked upon as a teacher. He is trusted with secret thoughts, and feelings of his patients, as no other is trusted.

They go to him for advise, for consolation and direc-

tion. To be capable to fill these high offices, he must be quick to feel, and prompt to sympathize, and intelligent to direct. To do these things he needs to know a thousand things besides his doctor books and pill bags. To reach this liberal culture, I should advise the young man contemplating medicine as a profession to take if possible a full college course. I know, gentlemen, that a young man may go through college and still be a great fool. He may bring nothing from the college halls but unpardonable pride and intolerable conceit. But if he have real stuff in him, it will not be so. He will have received a depth of culture and capacity for attainments which will give him an immense advantage in the struggle for existence.

But if a college course is not possible, the young man need not despair of a liberal education. Some of the most learned men in the world were never inside of college walls as students. The world is full of good books, and these should be made constant companions; the world is full of superior people, these should be sought out and cultivated.

But even, gentlemen, after the duties of active practice have been entered on it is not too late to acquire a liberal education. Some of you have not had perhaps the advantages of a college course. Some of you by hard work and close economy have earned the dollars, which have brought you to this point to-night. You have had neither time nor opportunity to do this outside work, valuable and indispensable as it is.

But it is probable that you will have *some* leisure in the first few years of your practice. Perhaps an hour or two each day may be snatched from the constant clamors of your patients. If these hours of leisure come to you as I have no doubt they will, seize upon them, do not let them go until they have paid tribute to your general store. Remember of course your profession first, but next everything that will make that profession cosmopolitan, liberal, grand and great in the largest sense

of those words. Professional life thus will not degenerate to professional drudgery, the mind will not be narrowed to fit an inflexible groove, and the largest development of professional life will be brought within the power of every one. While, therefore, you have done much, remember you have still greater things to do. Do not suppose when you secure your diplomas to night, that your fortunes are made. Surely were you to go hence to night without them, you would be none the less physicians. You may be sure that these pieces of parchment which you take with you will never save the life of a single patient. Let us sincerely hope that the number may be few who may hereafter point to them as the causes of their death. For a few days you will be very proud of them (at least we hope you will,) and show them to all your friends. Gradually they will be taken out less frequently, and you will come to think that in those autographs you have not hit upon the tracery of your fortunes.

We who remain, however, will try to so do our work that as the years roll on, you may look with growing pride upon these mementos, which you carry away to night from the Medical College of Indiana.

It is but fair that we should expect of you that conduct of life which will hereafter make us proud that we have given them to you. We have at least, gentlemen, labored to get your boats in place and give you a good send off in the race. But you must do your own rowing. Unless you "paddle your own canoe," you do not deserve to succeed. I have not time to night, gentlemen, to flatter your pride, nor would I now inspire you with false hopes of success. All of you will not succeed alike. It is even reasonable to suppose that some of you will fail. It is certain that all of you will have to do hard work. But while you are working for yourselves do something also for the profession.

Remember some of the things wanting which I have

tried to tell you about to night, and try to supply those wants. Be true men, and brave as well as good doctors, patient and industrious, and thus you will not disappoint the hearty good wishes with which your teachers tell you, good by to night.

VALEDICTORY.

*On part of the Graduating Class, Indiana Medical College,
Feb. 27th, 1874*

BY C. G. CLARK, M. D.

Members of the faculty—fellow students, Ladies and Gentlemen present. Sensible as I am of the great honor my fellow students have conferred on me, and at the same time feeling my total inability to say anything adequate to this occasion, I shall yet try in as simple a manner as I can to offer you a few thoughts bearing somewhat upon the events of this evening.

The present hour is to those of us, at least, who are now about to leave our *alma mater* and enter on the "world's broad field of battle," one of great interest, an hour to which many of us no doubt have looked forward with some eagerness of anticipation for months and years, and to which despite the sorrow of its partings, we will often recur with feelings of pleasure in the future. It is, in addition, an hour which makes a turning point in our career. Our past has been a state of preparation, our future is to be a period of action. Heretofore we have been gathering and storing up materials, from this time we must begin to use them. Hitherto medicine has been to us a science, hereafter it will be science applied and becomes also an art. "But, as we stand on the summit of this hour," let us not suppose that our medical education is finished, let us not suppose that the edifice is complete. On the contrary the foundation *only* is laid, and

it is according as we have been faithful in placing the support, that we shall be successful in rearing the superstructure. Our professors, with disinterested care and patience have sought to instil into our minds principles and precepts for action, but it is in our own experience that we must learn to apply them. I take it for granted that none of us have aspired to enter upon the duties of the high and holy calling which we have chosen without a full appreciation of its dignity and responsibility, but it may be well now as our paths are about to diverge that we look forward at some of the duties and obligations which will rest upon us and at some of the difficulties we have to encounter. Our path, hitherto, has been a comparatively easy one. We have profited by the labors and researches of our predecessors. Science, without hesitation, has unfolded to us the everlasting truths which were forced from her by others only after weary years of unremitting toil, and often in the midst of bitter opposition. I shall not attempt to detail medical history from its inception down to the present time; suffice it to say that from Hippocrates and Galen down to Harvey and Jenner, and from them down to our own age, noble self-sacrificing men have ever been found applying themselves with untiring energy and zeal to the advancement and diffusion of medical science. Nor is it in the study of the abstract truths of medicine that so much self-denying devotion has been shown, but in its practice also. Whenever poor destitute human beings have been found suffering in damp and crowded prisons, in the deadly atmosphere of infected dens and cellars, in the loathsome and filthy haunts of vice, *there* have been found noble, well educated men at the peril of their own lives and often without any hope of reward, engaged in the Christ-like duty of healing the sick. When great pestilences have swept over the earth, when fear of the fell destroyer has severed every bond of society, when the love of life has predominated over the

strongest natural affection, and the sufferers have been deserted by those nearest to them in ties of kindred and friendship, even then has the physician been found adhering with unswerving devotion to his convictions of duty, relieving pain and rendering less bitter the dying agony. Seeing, then, fellow-graduates, what has been done by those before us and what manner of men we must be to succeed, does it not behove us to go forth, fully comprehending our responsibilities and firmly resolving to arm ourselves efficiently for the struggle? And although so much has been done by such men towards elevating the standard of medicine, there is yet much room for improvement. There are rich veins of truth yet undiscovered and many fertile fields yet unexplored. We shall be expected to take up the work which others have so nobly begun and carried on; for science allows no idlers in her vineyard. She expects from every one whom she has favored a suitable return. If we would be worthy to inherit the mantles of those before us, we must work. There is no royal road to knowledge any more than to fortune. Labor is the only key that will unlock the book of Nature and turn, one by one, its mystic pages. We may, nay, we will meet with discouragements, but let us remember that "there is no excellence without labor," and that every difficulty successfully surmounted is a victory which will lend us confidence and self-reliance for the next encounter. Let our motto be "*Per Ardua ad astra.*" "Through difficulties to the stars," let us learn habits of close and accurate observation and severe precise study. Let us train the intellect and the will. In short, let us judiciously cultivate every faculty with which we have been blessed and every means at our command, so as to bring them all to bear in the best manner upon the purpose of our profession. In the language of Sir Thomas Watson's admirable paraphrase of Lord Bacon, "Let us not be like the empire ant who collects from every side indis-

criminally for present wants; nor speculate like the spider, who, seeking no materials abroad spins his web of sophistry from the recesses of his inner being; but let us imitate rather the praiseworthy bee, who gathering crude honey from *various* flowers stores it up within, and by his own operation matures and perfects it for future use." To many of us, doubtless, the practice of medicine will, for some years at least, narrow itself down to one very prominent point, to-wit: bread and butter. But fellow-students, if we have entered our profession with *no* other object in view than that of obtaining a livelihood we have committed an error. Unfortunately there are too many of this class already amongst us, let us not go to swell their ranks, let us work not only for our own good but the good of others. Let us labor not only for our own advancement in the profession but for the advancement of the profession as a whole. Let us be ever on the alert and take advantage of every opportunity we have to do our part towards strengthening the cause of legitimate medicine. Let us keep fixed aims before us and let those aims be pure; for as Owen Meredith says in "Lucille," "No Life can be pure in its purpose and strong in its strife and all life not be purer and stronger thereby." Let us remember in our every day life, and especially in our intercourse with others of the profession, that rule which should be acted upon as well by the true gentleman as the true Christian—the *Golden Rule*.

Thus shall our lives be, not as the ripple upon the surface which leaves its impress but for a moment and is gone; but as the strong undercurrent which gathering new force as it journeys onward, steadily and surely exerts its influence over every thing with which it comes in contact. But enough of this, the time warns me that the hour of parting is near. Soon shall we all have to say the saddest of all words, to say that word so replete with sorrowful reminiscences, *farewell!* Our paths, heretofore so pleasantly blended together must soon separate

and our happy associations will ere long be among the things of the past. I believe that Dickens in one of his Christmas stories tells us of an aged man who in youth had committed a crime, and from constantly brooding over it the remembrance of the crime and his remorse weighed so heavily on his mind that he prayed for his memory to be taken away, and his request was granted. The consequence to him was terrible. Life became as desolate as a desert. The memory of his childhood days and of a mother's love which had so often solaced him, was gone. He was as a man turned to stone. And at length the dreary blank became so fearful that he prayed for the gift he had throw away to be returned; and after it *was* returned, his constant prayer was "*Lord keep my memory green.*" May the recollection of the happy hours and pleasant associations of the past winter, though interspersed here and there with dark spots, *never fade*; may the memory of our joys, though they may have been chastened by sorrows, *remain forever green*. And you, our teachers who have guided us so faithfully and so well, what tribute can we pay to you for your patient care and diligent toil in our behalf? Nothing that will be adequate. Your reward will have to be the consciousness of duty well performed. Of this, however, you may rest assured that our good wishes, our respect, and our *love* will follow you wherever you go. May you be spared many years to labor for others as you have for us. May the hill of life though in its ascent steep and rugged, be made smooth and pleasant in its descent. And when the angel of each shall come, may you, though willing to go, be able to say with Arthur Bonnicastle, "Life is so grand, so beautiful, so full of meaning, so splendid in its opportunities for acting, so hopeful in its high results that despite all its sorrows, would willingly live it over again."

GENERAL CULTURE.

Address before the Students Association of the class of Indiana Medical College, Session 1873-4, Indianapolis.

BY F. M. KETCHAM, M. D.

About five years ago, I was playing a game of Base Ball in a town not a thousand miles west of Indianapolis. During the game I was run into by one of the players, his knee striking my leg just above the knee joint, making that member unfit for walking purposes.

I was carried to a house called a "Hotel," placed on a bed and visited by the "Doctor." This individual had a slouchy hat on his head, and a "quid" of tobacco in his mouth, half as large as my fist. He came up to the bed and said, "how're ye,—have a chaw?" Then he began his manipulations in the roughest manner possible—till I told him to stop. "Oh," said he, "your nerves need stimulatn', just drink this" (pouring me out about a pint of the raw material.) "No," said I—"I will not touch it." "Wall," said he, "you'll die if you don't take this stuff." "All right," I said, "live or die, you will never get that stuff down me."

While making a further examination of my lower extremity, he slobbered his tobacco juice all over the bed, and ended by blowing his nose on the floor and wiping his fingers on his hair.

I introduce this gentleman as a type of an unfortunately large class of professional men. Pretending to know much, they know nothing. They may have a knowledge of *great* things—may know how to amputate, ligate and the like, but they ignore *minor* things. Beale says, "There are perhaps few things upon which more misapprehension exists among young men, than the importance of mastering elementary practical detail, by which alone real success in the higher branches of work can be attained."

They enter an apartment of a sick lady with their

hats on, a cigar stump in their mouth (this might do, where an emetic was necessary)—now and then spitting on a clean brussels carpet, and begin immediately to question the poor sufferer, and, wishing to make the patient believe they are sympathizing with her, they stroke back the “auburn locks” from her placid brow, bringing three unbearable evils out in bold relief: Ill-manners, familiarity and vulgarity.

“Although a man may possess virtue, talent and good conduct, he may nevertheless be disagreeable. There is a certain fashion in *manners*, which is too often neglected as of no consequence, but which frequently becomes the basis on which the world will frown a favorable or an unfavorable opinion of you, and a little attention to render them engaging and polished will prevent others from entertaining prepossessions respecting you, which in their consequences may operate greatly to your disadvantage.”

If *familiarity*, after long friendship and intimacy, breeds contempt, the results of familiarity on first acquaintance can be far better imagined than described. Vulgarity is unbecoming to a noble, *any* profession, and especially the medical profession. Again, this class of the profession have no knowledge on ordinary topics. They don't know that the earth is round and has a double circuit or revolution; a daily and a yearly; the discovery of America, by whom and in what year; the “Declaration of Independence,” points which every school boy should know and have at his tongue's end.

Most, if not all deficiency in the profession comes from a lack of power to classify—to arrange thoughts and facts in their proper place. The careful country practitioner has his medicine arranged on shelves; acids on one shelf, alkalis an another, the tinctures on another, and the cerates upon the top shelf so that he can reach with ease each article, and not have the whole collection to look over for a certain bottle. And, too,

every bottle is labeled. Not so with the careless practitioner. The medicine is procured, but no label is adjusted. Every disease is to be treated with the new specific, (for this class deals in specifics.) Dr. Stevens' story about the Druggist who never looked at what he was dealing out, and by mistake took down the bottle of arsenic, etc., is to the point here. The profession, as a whole, treat a *name* instead of a disease—making themselves little better than automata. Such physicians are emphatically playing with edge tools. To cap the climax, they are ignorant of their own ignorance. "Alas! alas! how foolish to be wise, when to the wise no profit comes."

A young man (a native of America) went to Paris to take music lessons on the violin. He engaged a room and boarding at a cheap *Hotel*, and proceeded to take his first music lesson. On his return the landlady asked him how he liked his teacher, "Oh," said he, "I like him, but he is a peculiar man, a very pious man."

"Why," she exclaimed, "how so?"

"Well," said he, "all the time I played, he was on his knees crying 'Oh! Lord' what have I done to suffer thusly?"

Secondly—another class of physicians are they who have been through college, through courses of Lectures, through every preparatory requirement, but who stop study and, in consequence, improvement. As the soil, however rich it may be, cannot be productive without culture, so the mind without cultivation can never produce good fruit. Suppose, for example, that our blood received no nourishment, but went driving through the arteries and veins in the same quantity and quality. What would be the result? Plainly inanition. So with the mind, if the same ideas circulated through the brain, would there not be *mental* inanition?

It would be thought a hard government that should tax its people one-tenth part of their time to be employed in its service. But *idleness* taxes many of us much

more ; sloth, by bringing on disease, absolutely shortens life. Sloth, like rust, consumes faster than labor wears ; while the used key is always bright. Dost thou love life ? Then do not squander *time*, for that is the stuff life is made of. How much more than is necessary do we spend in sleep and idleness, forgetting that the sleeping fox catches no poultry, and there will be sleeping enough in the grave."

Burton, in his anatomy of Melancholy, says : 'Idleness is the badge of Gentry—the bone of body and mind, the nurse of naughtiness—the step mother of discipline—the chief author of all mischief—one of the seven deadly sins—the cushion upon which the Devil chiefly reposes, and a great cause not only of melancholy, but of many other diseases ; for the mind is naturally active ; and if it be not occupied about some honest business, it rushes into mischief or sinks into melancholy.' The blessing of an active mind when it is in a good condition, is, that it not only employs itself, but is almost sure to be the means of giving wholesome employment to others. The mind, like all other things, will become impaired ; the sciences are its food : they nourish but at the same time consume it.

Still a third class : These strictly confine themselves not only to their profession, but to one department of that profession. No sooner does the student graduate, than he narrows himself down to the knowledge of a single branch of the profession ; and not only that, he memorizes all he can find on his specialty. To memorize is not improvement, it is simply holding what one has already attained. The world is full of men of narrow culture—one-sided culture—men who give their whole time to the pursuit of one thing. The student who gives himself up to the study of one branch of the profession, may for a time become prominent in that branch, and may receive praise, or his knowledge and skill, which leads to pride. "Pride is a virtue—pride is

also a vice." This pride makes the possessor, in time, an object of disgust to his companions, and sooner or later he is dropped from the social circle. Then instead of seeing the true cause of this neglect, he takes it for granted that he is too high and mighty for them.

The General has under him many regiments, many soldiers. For perfect, united action, they must be drilled separately, then together. The drilling is to overcome any obstacle, any surprise. So with man. He has under him many faculties, and each faculty is capable of continued development and improvement. They must be drilled separately, then all are brought out on dress parade (quasi,) and when man says for such a faculty to be ready to answer to the call, he knows it will obey, for it has been drilled. Not so with the raw, inexperienced faculty; when command is given to advance, it is confused and retreats. We all have certain powers. The more we use them, the more they will act when called into play.

Fourthly: The first requisite to 'General Culture' is: an active inquiring mind; and he who has such a mind, and uses it properly, may accomplish anything. An inquiring mind finds out the causes, the history, the relations of things. Inquiring mind and patience go arm in arm to meet fortune; one digs and the other cheers. An engine without a governor would fly to pieces. An inquiring mind without patience would lead to the same result. What does an inquiring mind do for the student? It leads him to a knowledge of everything which books contain, and does not stop there, but discovers new ideas, and digs far into the hidden recesses of thought—not satisfied with any thing but brilliant, sparkling, deep thoughts.

The gold-digger works away day after day, not content with small lumps of the glittering treasure, but ever presses on with the hope of a vast fortune. He knows that great lumps lie *deep*, and are only obtained by hard,

patient labor. Thoughts—*great* thoughts lie hidden in the same manner, and require even harder digging. When once man reaches the region of great thought, he has reached the highest earthly good.

The heart needs culture as well as the head. A lawyer, a minister, a physician—yes! *any one* devoid of sympathy is a failure—a brute. Says Juvenal:

‘Who can all sense of others’ ills escape,
Is but a brute, at best, in human shape.’

Ah? but brutes have sympathy—all the more shame to that one who has *no* sympathy.

A physician who can—

“Smile on those who smile,
And weep with those who weep,”

go into any society, and people will love such an one. It is a sad but true fact that physicians, and especially surgeons, are suspected of having no sympathy. In too many instances this is the fact. Feigned sympathy is like a wolf in sheep’s clothing.

Gentlemen of the association: It is fitting that we should cast a retrospective glance on the history of our association; for we may be said to live twice, when we can reflect with pleasure on the days that are gone. Day after day we sat and listened to the volumes of theoretical knowledge as it poured forth from the vocal organs of our worthy Professors. We came and went, letting those golden moments flit by us unimproved, forgetting that “as every thread of gold is valuable, so is every minute of time.”

The subject of association was utterly ignored, till just before the “holidays.” When once it was fairly started, there was intellectual feasting for every hungry soul. Readers were appointed two weeks previous to the time of reading, giving ample time to prepare the essay—at the close of each essay, the subject was thrown open to the house for discussion—every one being at liberty to offer any suggestion, or personal experience—

approval or disapproval. To some, this experience seemed like a waste of time. As we look back to-night, we see what has been accomplished—what difficulties have been overcome. You know Coleridge says: To men, Experience is like the stern-light of a ship, which illumine only the track.

‘The melancholy day has come, the saddest of the year.’ To-night the curtain falls, and there is to be a new scene—a new act. Who will act the leading part—who the part of “Soup?”

In the audience room of life, the world sits watching every motion—every expression and hearing every word. Great things are expected of us. Then let us conduct ourselves in a way becoming *men*, remembering that “life is real, life is earnest.” Yet, at farthest, this life is but a day. Before closing, let me ask each one a question, and let every one answer it himself: What are your plans? ‘Get an office and practice of course,’ you say. What then? ‘Get a home, and a wife, perhaps.’ What then? ‘Why—die, I suppose.’ Yes—what then? You answer—nothing. “To die, to sleep;—no more? and by a sleep, to say, we end the heartache, and the thousand natural shocks that flesh is heir to—’tis a consummation devoutly to be wished. To die—to sleep;—to sleep! perchance to dream;—ay, there’s the rub; for in that sleep of death what dreams may come, when we have shuffled off this mortal coil, must give us pause; there’s the respect that makes calamity of so long life.”

“Finally, brethren, whatsoever things are *true*, whatsoever things are *honest*, whatsoever things are *just*, whatsoever things are *pure*, whatsoever things are *lovely*, whatsoever things are of *good report*; if there be any virtue, and if there be any praise, think on these things.

REPORT OF AUTOPSIES HELD AT CITY HOSPITAL, INDIANAPOLIS.

BY THAD. M. STEVENS, M. D., PATHOLOGIST.

M. C. presented during life symptoms of ulcer of the stomach, abdomen examined; the pyloric portion of stomach, found invaded by cancerous growth, orifice in portion of diseased mass through the coats of the stomach, cavity of abdomen filled with former contents of stomach.

Case 2d.—A. F. presented symptoms during life of effusion into right pleural cavity, dullness upon percussion, no respiratory murmur; examination of intercostal spaces showed the thorax full of fluid; nearly two gallons fluid found in right pleural cavity, lung compressed into space of three by four inches, upper lobes filled with tubercular deposits, with numerous small cavities, interspersed tubercular deposit found in spleen and omentum, nothing unusual found in other organs.

Case No. 3.—A. K. presented symptoms, during life, of disease of the brain. When admitted into the hospital was in a semi-comatose condition; hemiplegia of right side; head examined; appearance of blood under the scalp, at junction of left parietal and occipital bones. Upon removal of calvaria, a fracture was found running parallel with the sagittal suture, and about one inch to the left thereof, extending from the lambdoidal to the coronal suture; immediately beneath the discolored point, between the skull and dura-mater, a clot of blood found, color dark red, consistency firm, adhering to dura mater; the clot was about two and a half inches in breadth, and at the most prominent point one inch thick. The impression of the clot could be distinctly traced in the skull. At the point of greatest thickness the calvaria had been absorbed, producing a small orifice in the bone. The blood evidently came from the posterior meningeal artery, the rupture of which was

caused by the fracture mentioned; a small amount of blood of same consistency and appearance in every respect to the clot found between the sulci of the brain not extending more than one inch in circumference around the margin of the clot. No abnormal appearance of any kind found in the substance of the brain, and no indication of inflammatory action or other disease indicated in the membrane other than these described. The whole extent of the skull was of extreme thinness, transparent in many places, and at only one point was one-eighth inch in thickness. This was at the junction of the frontal bone. The previous history of this individual was very obscure. About two years previous he had some kind of a fit, after which he was disabled more or less in lower extremities for three months, recovered but was subject to fits. This was all that was known up to the day he was taken to the station house by the policemen who saw him fall upon the pavement, and immediately removed him thither. During the time he remained there he could converse, but upon removal to the hospital next day was in the condition above reported, and so remained until his death, two weeks afterward.

Reviews.

WYTHE'S POCKET DOSE AND SYMPTOM BOOK—Containing the doses and uses of all the principal articles of the *Materia Medica*, and officinal preparations. Also, tables of weights and measures, rules to proportion the dose of medicine, common abbreviations used in writing prescriptions, tables of poisons and antidotes, index of diseases and treatment, pharmaceutical preparations, tables of symptomology, outline of general pathology and therapeutics. By Joseph H. Wythes, A. M., M. D., late Surgeon United States Volunteers, author of "Microscopist," etc. Eleventh edition revised. Philadelphia: Lindsey & Blackisten. Indianapolis: Cathcart & Cleland.

This is certainly a very convenient little work, as good as any of its kind. However well informed one may be there are times when a "reminder" is of need, and although the old time prejudice against the "doctor who carries his book with him" is no doubt in great part founded in fact and truth, still no one need feel the least alarmed at having such a work as the present one near at hand in case of emergencies.

ANNUAL RECORD OF SCIENCE AND INDUSTRY.—Prepared by Prof. Spencer F. Baird, Ass't-Secretary of the Smithsonian Institution. With the Assistance of some of the most eminent men of Science in the United States. Large 12mo, over 800 pages, Cloth, \$2.00. Uniform in style and price with the volumes for 1871 and 1872. The three volumes sent by mail, postage prepaid, to any part of the United States, on receipt of five dollars. Harper & Bro. Publishers, Franklin Square, New York.

A work entitled "*The Annual of Scientific Discovery*" was discontinued when this Annual Record was commenced. The Record, therefore, although entirely independent of its predecessors, in reality forms a continuation; so that those who already possess the "*Annual of Scientific Discovery*" will do well to secure the present series.

A special feature of the Present Annual is its Biographical Record, alphabetically arranged, of the men of science who have died during the year, at home and abroad.

The value of the work is greatly increased, as a book of reference, by a thorough systematic index, to which specialists can conveniently refer for information as to any subject of study.

In addition to this, an exhaustive alphabetical index furnishes the means of ready reference to names and topics.

The volume for 1873 is much larger than either of its predecessors, occupying over 800 pages, of which 144 are devoted to the Summary.

A HISTORY OF NORTH AMERICAN BIRDS.—By Spencer

F. Baird, Thomas M. Brewer, and Robert Ridgway. The Land Birds complete in three vols. small 4to, illustrated by 593 woodcuts, and 64 plates of full life-size illustrations of the head of each species. Vols. I. and II. now ready; Vol. III. in March; Vol. IV., on the Water Birds, will, it is expected, be ready early in 1875. Price \$10.00 per vol.; colored by hand, \$20.00. Sent free of expense to any address on receipt of the price. Little, Brown & Co., Boston.

LINDSEY & BLACKISTON'S VISITING LIST FOR 1874.—This is one of the necessary adjuncts to the physician. It is made for twenty-five patients per week, with an almanac, table of signs, description of Hall's method in asphyxia, poisons and their antidotes, and tables for calculating the period of uterine gestations. Can be obtained of Cathcart & Cleland, Indianapolis.

Editorial.

From the Baltimore Underwriter.

"In the *Underwriter* for February 12th, the article entitled "A Safety Lamp," it seems to me that, in your desire to find a lamp better adapted to the oil in general use, you have temporarily lost sight of the important fact that no lamp can "protect its users against the ever-returning hazard of coal oil explosion," *so long as the lighter oils are used*. These oils are in themselves dangerous for use in *any* lamp at ordinary temperature—not precisely as gun powder is dangerous in any confined space, at temperatures near its explosive point, for the vapor of naphtha requires the addition of air to make it explosive—but, practically, the difference is slight, for air and vapor uniformly take the place of the oil displaced in burning, and the conditions for an explosion are likely to be present whenever such volatile oils are used in any lamp, for the reason that they give off a va-

por at ordinary temperatures, which will explode with violence, if mixed with air and ignited in a confined space."

"I quite agree with you in reading "various devices to prevent lamp explosions, with a degree of distrust and skepticism, which is justified by their failure after repeated trials;" and although the particular invention referred to may be an excellent safeguard against accidents in the use of moderately dangerous oils, still it should not be allowed to stand in the way of a vigorous war of extermination against all such oils. Bad oil is dangerous in any lamp; while good oil is comparatively safe in any lamp, even if broken."

"It is a violation of the law in Michigan to sell, offer for sale, or use any oil that can be ignited by a well-lighted match at a temperature of 150 degrees Fahrenheit, or that will give off any explosive vapor at that temperature. I am using oil that stands that test, and am delighted with its use. Experiments show that if a lamp containing such oil be broken, the light will usually be extinguished thereby; or, if not, can be extinguished without great difficulty, and as such oil does not give off vapor at any temperature likely to be reached in a lamp, an explosion is altogether improbable. Let us all unite in demanding that only such oil as this be used or offered for sale, and continue an uncompromising war upon the use, in any lamp, of oil which, at any temperature reached in ordinary lamps, will give off a vapor capable of being exploded on mixture with air."

Very respectfully, HENRY B. BAKER, M. D.

Lansing Mich., Feb'y 17, 1874.

Dr. Baker is a scientific gentleman, has done much for sanitary science in particular, and we are pleased to see that he does not in any way encourage the use of *bad* coal oil. But we presume to differ with the doctor; not, perhaps, in the possibility of having a specimen of oil that will not explode or take fire with a match, but in the practicability of getting such an oil for general and safe use. Commercial oil will not do to trust. We have tried all means in our power to obtain it even of *standard* quality, and failed. It cannot be had, as a rule. It is even more uncertain, and certainly more

suddenly fatal than commercial whisky. We would rather tolerate the use of the latter than the former. Away with the abominable, horrible stuff. It has been weighed and found wanting, and should be banished as a light producer, until none enter the market but that will not only stand the *legal*, but the practical and common sense test of safety.

THE Fifth Annual Commencement of the Indiana Medical College was held on the evening of the 27th of February, 1874, at Masonic Hall in this city. After the opening prayer by Rev. F. C. Holliday, the Rev. Dr. Cyrus Nutt, President of the Faculty of the State University, delivered an address upon "University Education," after which Gov. T. A. Hendricks made a short but very pointed address, which will be published in the next number of this JOURNAL. Following this, came the Valedictory address, on part of the Students, delivered by C. P. Clark, M. D., of Richmond, Indiana. This also will be given to our readers. The Valedictory upon the part of the faculty did not appear, owing to the serious illness of Prof. H. W. Wiley, M. D., who was not able to be present.

Major J. W. Gordon made a few appropriate remarks at the close of the exercise, recounting some of his experience when at Medical College, and "pointing a moral" therewith.

Appropriate music interspersed the exercises. Altogether, the present was a better conducted and more fully appreciated commencement exercises than any previous one. The class for 1873-4, numbered 107. We give below a list of the graduates, forty-nine in number: John M. Whitenack, Greenwood, Ind; Forbes H. Broughton, Kendallville, Ind; William N. Wishard, Southport, Ind; William M. Pearson, Greenfield, Ind; Lewis A. Beeks, Kokomo, Ind.; Samuel P. Hickman, Iberi, Mo.; Joseph Saunders, Anderson, Ind.; Simeon

T. Yancey, Fortville, Ind.; J. E. Bash, Charleston, Ind.; William C. Barnes, Mt. Auburn, Ind.; Albert O. Ward, New Bethel, Ind.; Jefferson Pugh, Marion, Ind.; John B. Cress, Indianapolis; Samuel Graham, Des Moines, Iowa; David R. Stewart, Kirklin, Ind.; J. M. Bash, New London, Ind.; Samuel F. Brunt, Alexandria, Ind.; O. A. Mendenhall, Xenia, Ind.; Orlando C. Irwin, Bunker Hill, Ind.; Charles G. Clark, Richmond, Ind.; Orlando B. Pettijohn, Deming, Ind.; Lindsey T. Lowder, Harrodsburgh, Ind.; A. B. Ballou, Burnett's Creek, Ind.; Givan D. Andrus, Colfax, Ind.; Charles P. Porter, Homer, Ind.; George C. Maughner, Waupecong, Ind.; Samuel J. Ramsey, Peru, Ind.; John M. Norwood, Indianapolis; Reuben C. Dunnington, Cloverdale, Ind.; William Kelsey, Monterey, Ind.; John W. Hitchcock, Owensburg, Ind.; William A. Todd, Garden Grove, Iowa; Robert Q. Haggerty, Elkhart, Ind.; Edmond W. Pearson, Indianapolis; George S. Crawford, Hope, Ind.; Hartily B. Emsperger, Rochester, Ind.; Frank M. Ketcham, Indianapolis; Josiah Taggart, Charleston, Ind.; Junius B. Pettijohn, Westfield, Ind.; Dudley M. Culyer, Spencer, Ind.; Lewis Carpenter, Carpenterville, Ind.; B. Mendenhall, Thorntown, Ind.; W. Rannells, Rochester, Ind.; A. B. Chaffee, Roanoake, Ind.; Jos. F. Sutherland, Carperntersville, Ind.; O. P. Collings, Indianapolis; J. N. Smith, Gosport, Ind.; E. L. Tons, Fort Wayne, Ind.; Joseph T. Robbins, North Salem, Ind.

After conferment of degrees, the audience was dismissed with a benediction by Dr. Holliday.

THE next meeting of the Hendricks Medical Society will be held at Danville, April 21st.

WE were under the impression that the State Medical Society met the first Tuesday in May, but find it is the third Tuesday (May 19th.) We hope the profession will be largely represented, as there will possibly be

enough County Medical Societies represented under the new organization recommended, to form a basis of re-organization of the State Society.

INDIANAPOLIS is now pretty well supplied with physicians of every kind—the polarizer turns out not a greater variety of colors or the kaleidoscope a greater number of scenes than the “Central City of the Atlantic Seaboard” does of professional men, medical especially—still, like an omnibus, we have “room for one more.” Among all this heterogeneous mass it would be impossible to properly designate the “prominent ones”—and even if it were the labor would be too great. We will simply mention *some* of the *specialists* of recognized ability, and who conduct themselves according to the “code.” Occulists are represented by Dr. C. Wright, Dr. Thompson and Dr. Lyons. All these gentlemen are to be recommended for their general good *professional* conduct and *skill*. Others whom we do not call to mind at present will forgive us the omission until memory serves us better. Dr. John M. Dunlap has for some years past attended exclusively to diseases of the throat and nasal organs. In this department there could be none better. If surgery shall be deemed a specialty then we have—but let us forbear, for the thought has struck us that if *Surgeons* then *Obstetricians* and the dealers with the organs of generation, rectum, mammary gland and the umbilicus should also be noticed.

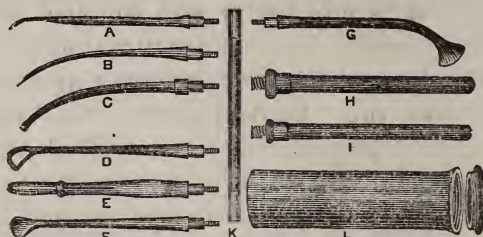
It has been asserted that the day has gone by when *one* physician can take a family by *exclusive* contract—not only the family but *each member* thereof must be divided out to various firms. Seriously, we think this is not only *true* but *proper*.

STAUFER'S SUPPORTERS.

Of Mr. Stauffer's instruments we have before spoken. Being composed of hard rubber they are light and inde-

structible, at least as much so as any. The accompanying cut represents a new addition to his series.

HARD RUBBER UTERINE EXAMINING CASE.



The screw top case L, contains a series of useful instruments in a compact form. The patient's fear of cutting by metal is by them avoided. A, is a pointed probe, yet not cutting as metal would be, by which the virgin os may be entered. B, a slim sound. If the point of either is dipped in a tenacious solution of the now popular Iodine, &c., a sufficient quantity can be carried repeatedly within the internal small os, where no brush can be made to enter. C, is a strong sound. D, a shifter; by it the os is readily brought within the speculum. E, a sponge or swab forceps. F, a test anteversion elevator. G, a retroversion lever. These all screw on either end of the centre piece K. The screws are brass, and the joints neatly capped. H, a quill caustic holder and case. I, a fluid caustic brush holder and case.

Price complete, \$8. Caustic holders H, or I, each \$1 25.

We see no reason why these instruments of Mr. Stauter's should not take the place of more costly but not more efficient ones. Not only his supporters but speculums, probes, caustic holders, etc., are coming into favor in the East, and are highly spoken of by physicians.

THERE has been left at our office for sale three microscopes—one achromatic, one students and one universal. The students and achromatic have lens of one-fourth, one-half and one inch focus. These instruments are very good ones of the kind, and will answer for any ordinary microscopic investigation; at least they are cheap for the money asked—the achromatic, price \$12, having also a camera lucida; the other two \$10 each.

